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CONTENTS: Vol. XLVIII. No. 25.

PAGE	PAGE
Bankruptcies and Failures 862	English News 855
Business Changes 874	Foreign and Colonial News 858
Corner for Students 854	French News 857
Correspondence:	Gazette 864
Chelsea Pensioner; The	Irish News 856
Chicago Awards 879	Legal Reports 860
Dog Poisoning; Is the Drug-	Marriages 874
trade Overcrowded? 880	New Books 874
Miscellaneous Inquiries 831	New Companies and Company
Information Wanted 832	News 864
Information Supplied 882	Next Week 882
Deaths 874	Novelties 872
Editorial Comments:—	Personalities 855
The Pharmacy Act and Patent	Practical Notes and Formulee .. 873
Medicines 866	Professor Attfield, F.R.S. 871
A Brilliant Failure 867	Scotch News 857
Alkali and its Influence 868	Spiritualistic Prescriptions 872
The Coming Opium Crop 859	Trade-marks Applied for 864
Bargain Number; Medical	Trade Notes 859
Officers for the Army; 100l.	Trade Reports 875
a Week; Quinine Wine 870	Up-to-Date Perfumes 873

VETERINARY COUNTER-PRACTICE.

A SECOND EDITION of this popular work has just been published. In its revision we have had the assistance of two competent veterinary surgeons, who have carefully gone over the book and made a number of additions and alterations. The new edition also contains a chapter of new and alternative formulas; and although the book is larger the price remains the same (3s. 6d.), or by post 3s. 9d. It can be obtained from most wholesale houses at the published price.

OUR SUMMER NUMBER.

THE Publisher invites applications for space in the issue of July 25, which will be the Summer Number—one of those half-yearly issues of THE CHEMIST AND DRUGGIST which have become noted for their artistic production, and business-value to advertisers and buyers alike. We shall be stitching circulars and price-lists in the issue; and as there will be no other opportunity this year of so distributing circulars and price-lists through THE CHEMIST AND DRUGGIST, it is advisable that those who are thinking of having an inset should settle the matter soon. Others who are not so thinking should see that they have a specially good advertisement in the number—attractive and well displayed in respect to arrangement, and seasonable and business-inviting in respect to the goods. Advertisers should also bear in mind that their announcements in the Summer Number will appeal to a large and important colonial and foreign *clientèle*, who buy readily and well such goods as may suit them.

Summary.

A NEW law has been passed in Belgium for regulating the sale of honey. It is rather stringent (p. 859).

AN attempt is being made to get a new pharmacy law in Italy with two grades of qualifications (p. 858).

THE incorporation of Messrs. Goodman's dentist's business into a limited company is reported on p. 861.

SOME British medicinal specialities are mentioned on p. 858 as having been prohibited from entering Russia.

IT seems that the new crop of opium will be deficient in quantity. We review the position in an article on p. 869.

THE renewed application to have the trade-mark "Bovril" removed from the register failed, the Court of Appeal holding: that it is a fancy word (p. 861).

OUR inquiry regarding "Chelsea Pensioner" has brought us a number of interesting replies, but the exact origin of the recipe is still obscure (p. 879).

IT is proposed to amend the Sale of Food and Drugs Act by enlarging the court of appeal at Somerset House, and by making penalties more stringent (p. 855).

NORTH of Ireland druggists are considering the advisability of getting the Pharmacy Act amended, so as to give them greater powers and privileges (p. 856).

THE cultivation of medicinal herbs in Russia is growing in importance, and the distillation of peppermint is improving both in quantity and quality (p. 859).

TWO THIRDS of those who reported on our last Corner for Students' mixture of salts failed to detect manganese. The conductor gives some hints on the matter (p. 854).

IT has been decided by the Select Committee on the Companies Bill to call evidence, which will give the Pharmaceutical Council the opportunity they want (p. 855).

SIR R. B. FINLAY, the Solicitor-General, has promised his most careful consideration to the pharmacists' claim when the Companies Bill reaches the House of Commons (p. 855).

OUR Paris correspondent gives biographical particulars regarding Professors Moissan, Picard, and Lippmann, who have been attending the Kelvin jubilee celebration at Glasgow (p. 858).

A DOCTOR who charged 3s. 6d. each for bottles of a medicine prescribed by his predecessor has recovered that price in the Lord Mayor's Court, though the defendant showed that he could get the same article from a local chemist for 1s. 9d. (p. 832).

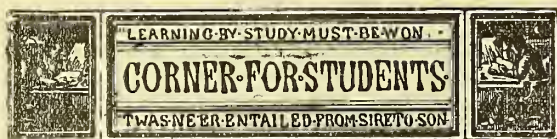
WE report a conversation with Professor Attfield, F.R.S., on the subject of his retirement, and with the interview we are able to present portraits of the professor at the time of his appointment—thirty-four years ago—and at the present time (p. 871).

LORD KELVIN (Sir William Thomson) has celebrated this week the jubilee of his appointment as professor of natural philosophy at Glasgow University, when scientific men of all nations joined in the civic and University festivities. We refer to Lord Kelvin's work on p. 857.

THE High Court judgment, in the case of the Pharmaceutical Society *v* Fox, is to the effect that Kay's Essence, which is a lapsed patent, cannot be regarded as coming within the exemption which is provided for "patent medicines" in the Pharmacy Act (pp. 860 and 863).

WE draw from the chief alkali inspector's report interesting particulars regarding the present position of the ammonia soda and Leblanc processes, the former of which is now in the ascendant. The utilisation of by-products from coal-combustion is also on the increase, and chemical manures are more than ever used (p. 868).

FINES under the Sale of Food and Drugs Act have been imposed for the sale of quinine wine not of B.P. strength, and of ipecacuanha wine containing salicylic acid. But "tousles mois" is held to be arrowroot; and the Kent analyst caused the dismissal of a summons through stating on his certificate that a sample of spirit of nitrous ether was bad (p. 861).



CONDUCTED BY RICHARD J. MOSS, F.C.S., F.I.C.

QUALITATIVE ANALYSIS.

THE subject of the next exercise in qualitative analysis will be a mixture of not more than three salts. The mixture is to be submitted to a thorough systematic examination, all its constituents are to be detected, and proof is to be given that the substances detected are the only constituents of the mixture.

Students' applications for portions of the mixture of salts (accompanied by a stamped and addressed envelope, not a stamp merely) will be received up to Wednesday, June 24, and the samples will be forwarded immediately.

Students' reports will be received up to Saturday, July 4. Each report should contain a concise account of the work done, and should include a list of the constituents detected. In this list any substance regarded as an accidental impurity should be distinguished from the essential constituents of the salts composing the mixture.

REPORTS.

The subject of the last exercise was a mixture of 1 part of manganous sulphate, 2 parts of ferrous sulphate, and 2 parts of potassium chromate. Its calculated composition was—

Mn	..	..	..	..	..	..	4.56
Fe	..	..	..	..	..	..	8.03
K	..	..	..	..	..	..	16.04
CrO ₄	..	..	..	..	..	..	23.96
S	..	..	..	..	..	..	21.73
H ₂ O	..	..	..	..	..	..	25.60
							100.00

The only impurities of any note were traces of sodium and chlorine.

Packets of the mixture of salts were sent to 69 correspondents, and in reply 31 reports of analysis were received. No fewer than 20 of our correspondents failed to detect the manganese in the mixture. The other constituents do not seem to have given much trouble, as there is only one failure each to record in the case of iron and potassium, and only two students failed to detect chromium. In no case was the sulphuric radicle not detected.

This exercise illustrates the importance of detecting manganese in the preliminary examination of a mixture. If it escapes detection in the dry way, there is great risk of its being overlooked in the wet analysis, unless, indeed, the quantity present is considerable. Fortunately, the blowpipe test for manganese is one of the most characteristic and sensitive of the dry tests. All compounds of manganese, when heated with a mixture of sodium carbonate and potassium nitrate, yield sodium and potassium manganates. These salts are of an intensely bluish-green colour, and a minute quantity of a manganate mixed with a large excess of fused sodium carbonate imparts a more or less green tint to the mass. It is difficult to take a quantity of a manganese salt small enough not to impart a brilliant green colour to several grains of sodium carbonate. The test is usually applied by fusing the mixture on platinum foil; with a little care a bead of sodium carbonate in the oxidising blowpipe flame gives nearly as good a result. If there is much manganese in the substance under examination, there is

some risk of the colour of the mass obtained being so dark as to appear almost black. The addition of more sodium carbonate and a repetition of the fusion will make the green colour visible.

The detection of either manganese or chromium in the preliminary examination has an important bearing on the method to be followed in the wet analysis. In the presence of either of these metals it is not safe to rely upon the examination of the precipitate produced by ammonia in the presence of ammonium chloride, separately from that produced by ammonium sulphide. It is better to deal with the mixed hydroxides and sulphides, and, having washed the precipitate carefully, to dissolve it in dilute hydrochloric acid in the cold, filtering from any nickel and cobalt sulphide that may remain undissolved. Sulphuretted hydrogen is expelled by boiling, nitric acid is added, and the solution again boiled, to oxidise any iron present. Sodium carbonate is now added until the free acid is nearly neutralised, then barium carbonate in decided excess. The liquid, which should be cold, is now allowed to stand some time, and filtered; the precipitate will contain the sesquioxides of the group, and the filtrate will contain the monoxides. No other method gives such a complete separation of the two classes of metals. In the present case iron and chromium were found in the precipitate, and all the manganese was found in the filtrate.

PRIZES.

The First Prize for the best analysis of the mixture of salts has been awarded to

EDWARD OCKENDEN, care of Tasmanian Eucalyptus Oil Company, 138 Leadenhall Street, E.C.

The Second Prize has been awarded to

JOHN GORDON NICHOLSON, 27 Valmar Road, Camberwell, S.E.

MARKS AWARDED FOR ANALYSES.

E. Ockenden (1st prize) ..	93	Felspar ..	81
J. G. Nicholson (2nd prize) ..	97	Ulex ..	80
Cumbriana ..	95	G. W. G. ..	79
H. W. J. Browne ..	94	A. P. Smith ..	78
Æneas ..	94	Ireland ..	77
Elemi ..	92	H. Howard North ..	77
W. G. S. ..	92	H. D. Kelf ..	76
J. Jupp ..	91	Bun ..	76
Disce aut Discede ..	90	H. Burns ..	76
Rosierucian ..	88	St. Michael ..	75
Uranium ..	83	D. W. C. ..	70
W. C. Pickering ..	85	Vindex ..	65
Petal ..	84	Rhnta ..	60
Acetylene ..	81	Myristice ..	0
Galeu ..	83	Derby ..	25
Franciscus ..	82		

TO CORRESPONDENTS.

Prizes.—The students to whom prizes are awarded are requested to write at once to the Publisher, naming the book they select, and stating how they wish it forwarded.

Any scientific book that is published at a price not greatly exceeding half a guinea may be taken as a first prize.

Any scientific book which is sold for about five shillings may be taken as second prize.

Note.—All communications should include the names and addresses of the writers.

ELEM.—There was a mere trace of chlorine present; possibly the sodium carbonate you used was not quite pure.

W. G. STRATTON.—You gave no evidence of the presence of a manganate.

J. JUPP.—The reaction of the powder was slightly acid and it may have absorbed some ammonia. See remarks to "Franciscus." The colour of the aqueous solution, and the behaviour of the acid solution with sulphuretted hydrogen, showed that chromium was present in the form of a chromate.

DISCE AUT DISCEDE.—There was no magnesia present. It is probable that the precipitate you obtained was due to manganese. Unless special care is taken to use a sufficiency of ammonium chloride, and to warm sufficiently after adding ammonium sulphide, manganese may escape complete precipi-

tation as sulphide, and in this case it will subsequently be thrown down as ammonio-phosphate on adding sodium phosphate to test for magnesia.

ROSICRUCIAN.—The effect of heat upon the powder and the effect of strong sulphuric acid afforded no indication of a nitrate.

URANIUM.—It is a common error to mistake certain acid odours for the odour of acetic acid. You will find it a good plan to check your observation by trying a corresponding experiment upon a known acetate. The ferric-chloride test was more trustworthy than you supposed.

W. C. PICKERING.—Having found that a nearly black mass, consisting probably of dark-coloured oxides, was left on heating the powder, you should have tried blowpipe tests for the principal metals yielding dark oxides.

PETAL.—You obtained a green mass on fusing with sodium carbonate and potassium nitrate, and you concluded that the colour was not due to manganese because the solution of the mass did not become pink on boiling. With a pure salt of manganese the pink colour is easily obtained, but it is a different matter with mixtures of various salts. The production of a green mass is a crucial test and is characteristic of manganese, although you may fail, by boiling the aqueous solution of the mass, to convert the green manganate into the pink or purple permanganate.

ACETYLENE.—See remarks to "Petal." Oxidation with nitric acid and red lead is a more certain method for producing permanganate.

GALEN.—The presence of both chromium and manganese should have been positively ascertained before you proceeded with the analysis in the wet way. One simple experiment decided the point.

FRANCISCUS.—The acid reaction of the powder was due to ferric sulphate, a product of the oxidation of ferrous sulphate.

FELP.—The cobalt-nitrate test is only applicable to substances which are infusible at a high temperature and white on cooling. See remarks to "H. H. North."

ULEX.—See remarks to "Discedant Discede."

IRELAND.—You added barium carbonate to a solution containing sulphates in quantity; the reagent cannot be used under such conditions. It should be applied to a solution obtained by dissolving in dilute hydrochloric acid the thoroughly-washed precipitate of hydroxides and sulphides.

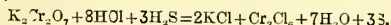
H. H. NORTH.—Try the cobalt-nitrate test with the oxides of magnesium, zinc, and aluminium, and with calcium phosphate, and when you see the result in each case you will understand how absurd it is to attempt the test with a nearly black mixture of oxides.

H. D. KELL.—Sulphuretted hydrogen should have been passed through the whole of the solution you examined; it had the effect of converting the chromate into a salt of chromium. See remarks to "Rhutra."

H. BURNS.—When the precipitated sulphides and hydroxides are treated with dilute hydrochloric acid, a residue of sulphur may remain, and entangled particles of sulphide sometimes give this residue a nearly black colour. Such a residue must be distinguished from the insoluble sulphides of nickel or cobalt.

D. W. C.—A solution should have been prepared by boiling the powder with sodium carbonate preparatory to examining for the acid radicles.

REUTRA.—The reaction that takes place when sulphuretted hydrogen is passed through a hydrochloric-acid solution of a chromate may be represented thus:—



This explains the separation of sulphur you observed.

DERBY.—You omitted to give a summary of your results. When the powder was heated there was no burnt-sugar odour such as tartrates produce.



The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.

Doctors and the Dispensing of Workhouse Drugs.

At a meeting of the Wells (Somerset) Board of Guardians, on June 10, the question of dispensing drugs by the medical officers again came up. (See *C. & D.*, June 6.) Mr. Hayes brought forward a motion that Dr. Maldea's extra salary for dispensing his own drugs be raised from 25% to 30%, but on a division the motion was lost.

Retired Chemist and Vaccination.

At the Torquay Police Court, on June 11, William Milne, a retired chemist, was summoned by the Newton Abbot Board

of Guardians for failing to comply with an order to have his children vaccinated. Mrs. Milne appeared, and said her husband was abroad, and she did not care to have the children vaccinated in his absence. He was opposed to vaccination. The Bench adjourned the case, in order that the Guardians might decide what course to adopt under the circumstances.

Chemists at Cricket.

At Raynes Park on June 13, Davy, Yates & Co.'s C.C. beat Newman House by 64 to 35. On the winning side R. F. S. Edward scored 23, and T. Sibley took 6 wickets for 20 runs.

Allenburys' C.C. (Allen & Hanburys, Limited) played the Allen C.C. (Stafford Allen & Sons) at Walthamstow on June 13. After an even game the Allen C.C. won by 45 to 38. For the winners, T. Warner scored 24 not out.

The May & Baker C.C. met Hodgkinson's C.C. at Raynes Park on June 13, and defeated them by 64 runs. The full scores were:—M. & B. C.C., 85; Hodgkinson's C.C., 21. For the winners, Harding carried his bat out for a fine 42.

Davy, Yates & Hicks C.C. would be glad to hear from drug-house cricket clubs who have open July 11 on their own ground and September 12 at Brockley.

The Companies Bill.

The Select Committee of the House of Lords appointed to consider the Companies Bill met at Westminster on June 12, and elected the Lord Chancellor as chairman. It was decided that evidence should be called. At the meeting on Friday, June 19, the Committee will decide whether the proceedings shall be conducted in private or not.

Recently the Inverness Chemists' Association deputed Messrs. Lewis Macleod and John Junor to prepare and send a memorial to Sir Robert Finlay, M.P. for the Inverness Burghs, and Solicitor-General for England, expressing the views of the chemists and druggists in his constituency on the pharmaceutical aspect of the Companies Bill, referring specially to Lord Herschell's amendment. The secretary has received the following reply:—

House of Commons,
June 9, 1896.

DEAR SIR,—I am favoured with your note of the 5th, and the very important and influential memorial therein enclosed. When the Bill comes to the House of Commons the views of the memorialists will have my most careful consideration. The point is one that has long been familiar to me, and I am thoroughly sensible of its importance.

Believe me, dear Sir, yours faithfully,
(Signed) ROBERT B. FINLAY.

The Sale of Food and Drugs Act: Proposed Amendment.

Mr. T. W. Russell's draft report, which is to be considered by the Select Committee on Food Products Adulteration next week, has been issued to members of the Committee. It suggests the establishment of a board of reference, which would decide all such questions as standards of food, the quantity of moisture permissible in butter, and the quantity of fat permissible in milk, and to which would be referred all questions of adulteration. In other words, Mr. Russell proposes to enlarge the court of appeal at Somerset House, not to set up a separate body. With regard to penalties he is willing to give the magistrates a wide discretion in dealing with first offenders, but he suggests a fine of 5*l*. for a second offence, and imprisonment in flagrant cases for subsequent offences.

Drug and Chemical Contracts.

At the meeting of the London County Council, held on Tuesday last at the County Hall, Mr. J. Thornton, chairman of the Stores Committee, submitted a report on the tenders received for the supply of stores for the Council for one year from July 1, 1896, to June 30, 1897. The tenders received from the following firms were accepted, and the solicitor and clerk of the Council was instructed to complete the contracts:—Chemicals: Townson & Mercer, and J. Orme & Co. Disinfectants: Adams, Webster & Co. (Limited); Tuson's Disinfectants Company (Limited); Livett, Frank & Son; the Sanitas Company (Limited), and Newton, Chambers & Co. (Limited).

On Monday, at the meeting of the Marylebone Board of Guardians, the tender for the supply of drugs to the Maryle

bone Infirmary and the North and South Dispensaries by Messrs. T. Hodgkinson, Prestons & King, for the ensuing quarter, for 180*l*. 5*s*. 6*d*. was accepted. For the supply of druggist sundries to the Infirmary and the North and South Dispensaries for the next three months, the tender of Messrs. Burgoyne & Co., for the sum of 68*l*. 5*s*. 10*d*., was accepted.

Embezzlement at Oldham.

An elderly, well-dressed man, named Chadwick, was fined 10*l*. and costs, or a month's imprisonment, at the Oldham Police Court on Saturday, for embezzling various sums of money from Messrs. Hulme & Co., wholesale druggists and chemists. The amount of the defalcations at present ascertained reaches the sum of 16*l*.

The Adulteration of Beeswax.

Mr. C. A. Seyler, analyst to the Glamorgan County Council, in his report for the past quarter, says all the samples of drugs he received were of good quality, with the exception of those of beeswax. "It appears to me," he remarks, "that there is very little genuine beeswax on the market. None of the samples submitted to me were genuine. One contained no beeswax at all, but was a mixture of about 30 parts of resin and 70 parts of ceresin or mineral wax. The remaining samples contained 75 and 80 per cent. of paraffin mixed with genuine beeswax. There is no reason why this product should not be sold for household purposes, but I would recommend grocers to sell them as household or domestic wax, but certainly not as beeswax. There is some legal difference of opinion as to whether beeswax is or is not technically a drug. I would point out that it is used in a dozen pharmaceutical preparations, including ointments, pills, and plasters, for which purposes the above wax-substitutes would be quite unsuitable."

Botanical Excursion.

On Monday, June 15, the students of the Sheffield College of Pharmacy, accompanied by the principals, had a botanical excursion to Castleton, where some thirty or forty good specimens were obtained illustrating the flora of the district. After the flower-hunt the party took a meal at the Bull's Head, and left Hope by the 9.15 train for Sheffield.

First Aid in a Drug-store.

The *Medical Press and Circular* gives particulars of an action brought against a certain drug company last week, but settled out of court. It appears that some months ago a lady who happened to be passing the establishment entered and asked for a dose of sal volatile for a bad headache. The young man behind the counter, it is alleged, gave her a dose of a strong solution of ammonia. Whatever it was it produced an agonising pain in the throat, and caused the patient to cry out as soon as she could speak that she was poisoned. The manager, after dragging her into the back of the shop, administered what he described as an emetic. Finding that it failed to act, he sent her home in a cab, telling her to send for a doctor at once. It was too late, however, for medical treatment to be of much avail, and for some days she remained in a critical condition, the greater part of the mucous membrane of the oesophagus coming away in sloughs. After a tedious convalescence, she recovered from the acute symptoms only to find that her sense of taste was gone, and that she was not only unable to distinguish between different articles of food, but that even such pungent substances as oil of cloves, acetic acid, and strong solution of quinine, when applied freely to the tongue produced no sensation. She lost her appetite, and also lost considerably in weight. Dr. Murrell and Mr. Tubby, of the Westminster Hospital, as expert witnesses, were prepared to state that in their opinion the injury was permanent; while Mr. A. J. Pepper, who was retained for the defence, was prepared to take a somewhat more favourable view of the circumstances. A goodly array of counsel was engaged and damages were laid at 1,000*l*. At the last moment the matter was settled out of court, on terms which were understood to be favourable to the plaintiff, the defendants undertaking to pay all costs.

A Taste for Chlorodyne.

The Plymouth Magistrates had before them on Monday last the case of Patience Tollidge, who was charged with

obtaining by false pretences several bottles of chlorodyne on different dates since May 15, from Messrs. Balkwill & Co., chemists, of Old Town Street. The assistant who supplied the chlorodyne deposed to prisoner's stating that the chlorodyne was for Mrs. Snow, a customer of the firm, who denied any knowledge of the affair. Detective Dart stated that on examining the rooms of accused he found twenty-one empty chlorodyne bottles, the prisoner evidently having a liking for that preparation. Accused was committed for trial at the Quarter Sessions, bail being allowed.

The Ammonia Bottle.

An unfortunate accident occurred on Tuesday last to Mr. William Taylor, chemist and druggist, of Red Lion Square, Haver. Mr. Taylor was endeavouring to loosen the stopper of an ammonia bottle, when the vessel burst, and some of the ammonia spurted into his face, seriously injuring his eyes. Dr. Eames rendered all possible assistance, and Mr. Taylor is progressing favourably. The intense heat is supposed to have been the cause of the bottle bursting.

Assault on a Chemist's Assistant.

At the Southwark Police Court, on Wednesday, a labourer named John Wade was charged with committing a violent assault upon Mr. John Frazer, a chemist's assistant, residing at Lavender Hill, Wandsworth. The evidence of the prosecutor went to show that while he was walking in the Brixton Road, the prisoner, without the slightest provocation, dealt him a severe blow in the face, and then ran away. He was followed, however, and captured by the police. The prisoner said it was all through drink; but the Magistrate said that was no excuse, and sentenced him to seven days' hard labour.

A Chance for Burnley Drug-drinkers.

Mr. C. E. Dodsley, who lately took over Mr. Evans's business in Manchester Road, Burnley, is holding a fourteen days' sale. A local paper says:—"If the step is not entirely unique in regard to the drug-business, it is certainly unusual, and cannot fail to be appreciated. A glance at the windows will prove interesting. A miniature fountain and other novelties are attracting much attention night after night. Mr. Dodsley deserves success, and doubtless a discriminating public will help him to achieve it."



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Chemists' and Druggists' Society of Ireland (Northern Branch).

A general meeting of the members of the above branch was held on June 12 at Belfast. Mr. S. Clotworthy was in the chair, and there was a good attendance. Mr. R. Campbell acted as secretary in place of Mr. Rankin, who had not recovered from his accident. The Chairman said they had to consider the question of securing adequate representation on the Council of the Pharmaceutical Society, and whether they should proceed for a new Bill or seek to have the present one amended. Mr. Campbell pointed out that the original Bill, when introduced to the House of Commons, provided that there should not be fewer than seven members representing their section on the Council, but when the Bill was brought forward for final reading, this clause was so altered that it read "not more than seven." Mr. Hanna strongly objected to amending the Bill, and contended that they should proceed for a new one that would place them on a par with their brethren in England and Scotland. The chemists and druggists of Ireland, of whom there were between 700 and 800, were never in a better position than at present to demand their rights. Ultimately a committee,

consisting of Messrs. Clotworthy, Watson, Gihson, Atchieson, Lyttle, Jamieson, Walsh, McKinglin, and Hanna, was appointed to take charge of the matter and report at an adjourned meeting to be held on June 25. Mr. Gibson reported on the work done by the Anti-cutting Committee. On his suggestion Messrs. McDowell, Shaw, and Lyttle were appointed to revise the retail list.

Business Changes.

Mr. Clement B. Vance, L.P.S.I., proprietor of the Harcourt Road pharmacy, Charlemont Street, Dublin, has opened a branch medical hall at Howth.

Corry's Medical Hall, Cromac Street, Belfast, is about to be sold by public auction, in consequence of the death of the late proprietor, Dr. T. F. Corry.

At Dublin, on June 11, the effects of John Darcy, chemist, were auctioned off by direction of the Court of Bankruptcy in Ireland.

Re F. King & Co. (Limited), Belfast.

Last week, at Dublin, the Master of the Rolls awarded to Messrs. Johnson and Fitzsimons, the liquidators of the firm of F. King & Co., Limited (Edwards' Desiccated Soap), Belfast, the sums of 175*l.* and 2,750*l.* respectively, for winding up the liquidation of the company satisfactorily.

Personal.

Dr. Whitaker, apothecary, Belfast, has been offered and accepted the newly-created post of Lecturer on Sanitary Science at the Queen's College, Belfast.

Dr. Alexander Gordon, pharmaceutical chemist, Rathmines, has within the last few days resumed his professional duties, having quite got over the effects of his severe accident.

Mr. William Hayes and Professor Tichborne, members of Council, have returned to Dublin—the former from his Russian trip, and the latter from Westminster, where he was attending a Parliamentary Committee as gas examiner for Dublin to the Board of Trade.

A Dublin paper, in an article on Lord Kelvin, in which it is shown that the distinguished scientist is an Irishman by birth, mentions that he fills the chair of "National" Philosophy in Glasgow University—whether it is of the Scotch or Irish variety is not stated.

Wanted 500*l.*, and got Nothing.

Messrs. P. A. Leslie & Co., wholesale chemists and druggists, Dublin, were on Monday last the defendants in an action brought against them by a man named Quaid to recover damages, laid at 500*l.*, for personal injuries received in January last, through having been knocked down by a van belonging to the defendants. Contributory negligence was pleaded by the defendants, and the jury, concurring, returned a verdict in favour of Messrs. Leslie.

Medicine-measuring in a Dublin Infirmary.

A strange case of alleged wrong administration of medicine in the North Dublin Union has been investigated, under a sworn inquiry instituted by the Local Government Board. A pauper night-nurse was charged with having given a patient a wrong dose of medicine. Dr. Kennedy, one of the witnesses examined, described the practice which prevailed at the hospital in regard to the dispensing of medicine. In his opinion, the pauper night-nurse in question was hopelessly stupid. He asked the nurse to give a dose of medicine in his (witness's) presence, and, as he expected, he mistook the dose, putting in the lesser and omitting the greater, or more important, medicine. Witness commented on the absence of instructions from the bottle containing the medicine. The inquiry was concluded.



Botanical Excursion.

On Saturday, June 13, the students attending the Glasgow and West of Scotland School of Pharmacy, accompanied by the principal, had a botanical ramble to the Glasgow Water Reservoirs, about nine miles from the city. A great number of wild flowers were collected along the banks and in the woods adjoining.

Gibson v. Anderson.

In the Court of Session, on Wednesday, Lord Kincairney gave judgment on the question of relevancy of the action by Messrs. Gibson & Co. against Anderson & Co., wholesale chemists, Leith, for 500*l.* for alleged breach of agreement in not stopping a case in the Debts Recovery Court after they had agreed to do so. Lord Kincairney, in giving judgment, referred to the cases which had been quoted on behalf of the defendant, but said there was a decision by Lord McLaren, in a case similar to the present one, in which he gave it as his opinion that if the question between the parties was one of breach of contract there was no propriety in holding that the defender acted maliciously. Deferring to that opinion, he would allow the issue on that point. He would not express an opinion as to whether injury had been done to the plaintiff by the proceedings. That was a question for the jury. The relevancy of the action was therefore sustained, and the question of expenses on this part of the case was reserved.

French News.

(From our Paris Correspondent.)

HONOUR TO A PHARMACIST—M. Charles Buchet, the popular director of the Pharmacie Centrale of France, has been created a Chevalier of the Legion of Honour.

AN UNFOUNDED MEDICAL CERTIFICATE.—In the case of the Paris pharmacist, M. MacAnliffe, whose accusers, as reported in the *C. & D.* of June 6, have been imprisoned for perjury, it has been shown that the certificate given by Dr. Froger testifying that Mme. Ponteau, who brought the charge of assault, was suffering from bruises on her body, had been given without personal examination by the doctor, and he appeared last week in answer to a summons taken out by M. MacAnliffe for damages, which were estimated at 5,000*fr.* (200*l.*). After reviewing all the evidence of the case the Judge formed the opinion that the doctor had been guilty of great negligence and imprudence in delivering what was termed a "certificate of confidence" merely on a patient's declaration, especially as he must have been aware that it might be produced as evidence. Taking into consideration, however, that he had apparently acted in good faith, he was let off with a fine of 500*fr.* (20*l.*), and costs.

THE SALE OF SERUMS AND THE PASTEUR INSTITUTE—The *Libre Parole* has recently published an article by Dr. Paquelin, with reference to the company formed some time ago with a capital of 10,000*fr.* (400*l.*), with its address at the Pasteur Institute. The promoters are accused of having "in a premeditated way transformed the sanctuary of which they have the inheritance and the safe-keeping into a house for selling at profit for the benefit of the shareholders," also with the object of speculating in land in the neighbourhood of the Institute. The writer extracts from the statutes of the company a provision that "the general meeting will decide as to the distribution of the profits amongst the shareholders, or if they are to be used in developing opera-

ARSENIC MINING IN CORNWALL.—The secretary to the Dolcoath Mine (Limited), in reporting on the working of the mine during the past three months, states that the old workings are being searched in the shallow levels for arsenic, the price of which is now considerably enhanced. Some fairly productive ground has been found in the South Entral Lode.

tions." The fact is commented on that the shareholders' list comprises the names of M. Duclaux (director of the Pasteur Institute) and M. Grancher (professor at the Paris Faculty of Medicine), both of whom form part of the official commission charged with examining applications for authorisation to manufacture and sell serum. Dr. Paquelin draws the inference that the Institute can no longer be regarded as a benevolent institution, but that it is a commercial establishment, working under privileged conditions. In a subsequent interview regarding the article, M. Duclaux has explained that the writer has not thoroughly understood his subject. He says that the company formed last December intends to build a hospital and dispensary in the Rue Dutot, for the application of the Pasteurian methods. The sale of the serums belongs to another service of the Pasteur Institute, under the direction of Dr. Ronx, and the profits are exclusively devoted to the purpose of the Institute.

SUBSIDISING SCIENTIFIC LABORATORIES—A Bill brought forward at the Chamber of Deputies last Thursday by M. Andiffred, with a view to subsidising the various laboratories of the French Faculties of Medicine with a total sum of 250,000*fr.* (10,000*l.*) for scientific researches, met with considerable opposition. A pharmacien deputy, Dr. Bonrgoin, expressed surprise that ratepayers were asked for money for scientific experiments. In his time, he said, they were satisfied with very moderate laboratories, and researches, quite as interesting as those of the present time, were made without luxury. He asked the Chamber to vote against the law, saying that they "ought to resist generosities which are not necessities." M. Villegean contended that it was dangerous to encourage laboratories of medicine in the research of applications of serotherapy, adding that they scarcely knew yet if this method can be relied on for the treatment of diphtheria. M. Andiffred warmly defended his Bill, explaining that each of the laboratories of the Faculties of Medicine have only 1,500*fr.* (60*l.*) per annum, whereas in Germany the smallest has 15,000*fr.* (600*l.*). He spoke of the necessity of continually searching for scientific means for curing infectious maladies, "which are a hundred times more disastrous than a war." After further discussion, it was decided that the amount should be reduced to 125,000*fr.* (5,000*l.*), and for one year only.

FRENCH REPRESENTATIVE SAVANTS.—The three delegates of the Académie des Sciences who attended the Kelvin Jubilee were MM. Moissan, Picard, and Lippmann.

M. Henri Moissan is, perhaps, the most brilliant of all the professors at the Paris School of Pharmacy, where he has occupied the chair of toxicology for the last ten years. He is 44 years of age, with hair turning slightly grey, and is conspicuous among his more bent and elderly colleagues at the Academy of Science, of which body he has now been a member since 1891. He is a native of Paris, and was a pupil of M. Berthelot, like many of his fellow-professors at the School of Pharmacy. His connection with the school dates from 1879, when he was appointed chief of the practical chemistry classes (laboratory work). He was elected a member of the Academy of Medicine in 1888 (pharmacy section). His thesis, when graduating as doctor of physical science, was a striking treatise on the cyanogen series, and his contributions to the minutes of the Academy of Sciences are numerous and noteworthy. His papers on "Oxide of Iron" (1877), "Chromium and its Compounds" (1882), and "Fluoride of Arsenic" (1884) may be cited amongst others. He is particularly remarkable as being the first to succeed in isolating fluorine. His researches on this subject were presented to the Academy in 1886 and 1889, while in 1890 he contributed a paper on "Fluoride of Carbon." Of late years the electric furnace has enabled him to melt many hitherto refractory metals, its heating-power exceeding 3,000° C. It was in December, 1892, that he first described this apparatus; in 1893 he produced artificial diamonds by its use; since then he has melted molybdenum and titanium, and produced carbide of calcium, which has led to developments in the use of acetylene. Still a comparatively young man, as scientists go, it seems likely that his future will not be inferior to his past. Urbane and pleasant in manner, he is both respected and liked by his fellow-professors and by the students.

M. Charles Emile Picard is best known for his works on

algebra and kindred studies; he has been a member of the Academy of Sciences since 1889, and is, like M. Moissan, a native of Paris.

M. Gabriel Lippmann, on the other hand, is a native of a small town in one of the smallest States of Europe, having been born at Hallerich (Grand Duchy of Luxemburg) in 1845. M. Lippmann studied at the well-known Ecole Normale of Paris from 1868 to 1882 and then spent three years in the German universities. Returning to Paris, he graduated as doctor of sciences with a thesis on electric and capillary phenomena, and invented the capillary electrometer and two or three other clever apparatus, professed mathematical and experimental physics at the Academy of Sciences, wrote works on thermo-dynamics, acoustics, and optics, and finally turned his attention to photography in colours, and obtained his first results in 1892; and in 1893 M. Lumière, of the Lyons photographic firm, put his actinic invention to practical use. Physically he is a bushy-headed, bearded man like M. Moissan, but of somewhat more advanced age. He is one of those who were capped LL.D. at the University of Glasgow on Tuesday.

Foreign and Colonial News.

THE FAILURE IS ANNOUNCED of Mr. Harry Glover, who carried on a pharmacy at Capetown. The assets are 111*l.* 7*s.*, the liabilities 227*l.* 5*s.*

THE ST. LOUIS CYCLONE—Six drug-stores were "completely wiped out," and five damaged, by the terrific cyclone which visited St. Louis on May 27.

BUSINESS CHANGE—Mr. Mapara has lately succeeded to the old-established business of Messrs. Heeralal Mooljee & Co. of Sheikh Memon Street, Bombay. Mr. Mapara has had a share in the management of the business for some years.

OF PHARMACEUTICAL DESCENT.—Mr. James T. Morris, who has been recently elected a member of the South Australian Legislative Assembly, is the eldest son of the late Mr. James Morris, at one time a chemist and druggist, of Bolton.

THE CANADIAN DRUG-TRADE—As will be seen from the following figures, the proportion of dutiable drugs and medicines as against free preparations imported into Canada is constantly decreasing. In the fiscal years ending June 30, it has been as follows:—

	1893-91	1891-2	1892-3	1893-4	1894-
Dutiable ..	\$ 50,107	76,759	64,016	84,238	34,55
Free ..	\$ 44,002	60,616	82,172	83,897	140,230

PHARMACEUTICAL EXHIBITIONS.—In addition to the exhibition which will take place in Prague this autumn, international pharmaceutical exhibitions will probably be held in the course of next year at Brussels (in connection with the World's Fair to be held in that city) and at Stockholm. A similar exhibition will be held at Dresden in the course of the year. This exhibition is especially intended to illustrate the development of scientific pharmacy in Germany since the year 1820, that year having been selected as the one in which the German Apotheker Society was founded.

PROHIBITION OF MEDICINAL PREPARATIONS IN RUSSIA—The Russian Customs department has issued a circular prohibiting the importation of certain pharmaceutical preparations and cosmetics which have been analysed by the Imperial Medicinal Council during last year. The preparations are mostly of German, French, or Italian origin, but also contain a few British or colonial articles, such as eucalyptus honey Matthews' fullers' earth, and "sirop of senna" prepared by Squire & Sons. Among the foreign articles of which the importation is prohibited are Professor Kleb's anti-diphtherin, solutions of pure hæmoglobin, ichthyol-vasogene, iodoform-vasogene, creasol-vasogene, creolin-vasogene, and Krewel's pilulæ sanguinalæ.

PHARMACY IN ITALY.—In the Italian Chamber of Deputies Signor Squitti has brought in a Bill for the reform of pharmaceutical education and the practice of pharmacy. He proposes to form two classes of pharmacists—viz., a lower

or so-called country pharmacist class, the members of which must pass a State examination, and doctors of pharmacy who have obtained a doctor's degree in chemistry and pharmacy at one of the foreign Universities. The lower class will only be permitted to practise in country districts especially designated by the Minister of the Interior. Candidates for this degree must have passed their twenty-first year, show certificates that they have gone through a gymnasium or one of the intermediate State schools, and must have been apprenticed for at least one year in a pharmacy specially appointed for that purpose in the province where they are domiciled.

A LEPROUS "QUACK" AS A GOVERNMENT OFFICER.—The *Cape Times* denounces a "leper-quack" whose treatment of leprosy appears to be believed in by President Krüger. Quite recently his Honour, it would seem, publicly announced in the Volksraad that Coetzee, the "quack" in question, had cured three lepers with his special treatment, and that the patients had been discharged. The *Volksstem*, an Afrikaner journal, states that these three patients had been examined by Drs. Veale and Lingbeek, and that the medical men were satisfied that a cure had been effected. Dr. Veale, however, denies that he ever made such a report, but states that he was asked by the Transvaal Government to give reports on the cases mentioned. "I found one patient," he says, "a white woman, only slightly afflicted with leprosy, and recommended that she should be removed from the Leper Asylum to another place for moral reasons, and that she should have special attention as regards delicacies, attendance, &c." The other two reported cases were young men (brothers), named Venter, who were of a leprous family, and were inmates of the asylum, but on whom no signs of leprosy had ever been observed. Mr. Coetzee, it would seem, receives a salary of 800*l.* a year, and expenses, from the Transvaal Government.

REGULATING THE HONEY TRADE IN BELGIUM.—Very strict regulations, intended to abolish the traffic in adulterated honey, have just been passed into law in Belgium. They render it an offence to apply the word "honey" to any other material than the pure product of the bee, and provide that in case the bees are fed artificially (excepting in so far as artificial food is necessary for their sustenance in winter) the product must be brought into trade under its proper name—e.g., sugar of honey, glucose honey, or mixed honey. Any mixtures of a pure natural honey with other substances must be labelled as artificial honey or mixtures of honey, with the name of the substance employed. It is absolutely prohibited either to sell, offer for sale, or to have in one's possession honey containing more than 1 per cent. of pollen, wax, or other substance insoluble in water, or containing more than $\frac{1}{2}$ per cent. of mineral substance (ash), or which contains remains of insects, or is otherwise considered unfit for food. The true denomination of the honey must not only be contained on all vessels in which it is put up, but also on all invoices, bills of lading, and other documents relating to the article. The vessels must further bear either a registered trade mark or the full name and address of the manufacturer or seller.

A NEW BLIND FOR SHOP WINDOWS.—A patent agent in Berlin announces that he has made experiments with a new form of roller-blind for shop-windows, which appears to be a great improvement upon those now in vogue. The cord connected with the blind passes into a horseshoe-shaped glass vial partly filled with mercury and closed at each end. Platinum wire has been fixed into the tube at intervals, and is in connection with a small electro motor. This motor acts automatically, lowering or drawing up the blind according to the intensity of the solar rays that fall upon it. The *rationale* is as follows: The sun's rays fall only upon one of the two bulbs at the bottom of the horseshoe thermometer, the other bulb being protected by a jacket. As soon as the air expels the mercury from the first globe and causes it to travel towards the other arm, contact with a wire is effected. This closes the electric current and starts the mechanism connected with the blind, thus causing it to fall down. As soon as the action of the sun upon the globe ceases the mercury retakes its old place and the blind is raised. It is said that a complete installation of this blind only costs about 15*s.* A special advantage of the new invention is said to be that goods may remain on show all

over the Sunday, when the shops are closed, as the blinds open and shut according to the action of the sun, and there is, therefore, no possibility that the goods will fade or otherwise be spoiled.

RUSSIAN DRUG CULTURE.—A Mr. Popkoff, who is a large grower of medicinal herbs in Russia, gives some interesting information concerning the development of that industry in his country. He states that within recent years an enormous demand for good Russian medicinal herbs has sprung up from abroad, especially from Hamburg firms, one of which purchases not less than 500 tons every year. The herbs most in demand are chamomiles, sweet-clover herb, liquorice, valerian-root, worm-seed, linden-flowers, mustard, fennel, caraway, and coriander seeds, as well as other seeds of the *Umbelliferae*, all of which are sold by waggon-loads for use in essential-oil manufacture. Unfortunately the industry is not yet big enough to supply anything like the quantities demanded. The climate and the soil of Southern Russia and the Caucasus are extremely suitable for the cultivation of medicinal plants, and the only thing that has hitherto stood in the way of a great extension in the culture is the fact that the land in those parts is not owned by individual proprietors, but by the Mir or village communes, which refuse to part with their soil on long leases. The want of capital is also a considerable drawback, which is the more to be regretted as, according to the experience of the writer, the culture under moderately favourable conditions leaves a net profit of from 300 to 500 per cent. Castor-oil seed is also a large article of production, nearly 3,500 tons of it being sold last year. The Russian seed contains upon an average only 23 per cent. of oil. The cultivation of peppermint, and the production of oil therefrom, has also enormously increased of late years, and, according to Bassonoff, the production of the district of Rostof is about 23,000 tons of herb—a statement which we cannot help thinking enormously exaggerated. In Central Russia and in the Government of Tula vast quantities of mint are also grown. The best Russian herb is grown in the district of Weneff, and is mostly brought into trade as "dried herb." Peppermint oil is generally distilled in a small domestic way by the farmers, hence the yield is small and the quality unsatisfactory. There are, however, also several well-equipped factories which produce a good commercial article. The range of prices in Russia is generally from 9 to 14 roubles per lb. for Russian, 9.40 roubles for German, and from 25 to 30 roubles per lb. for English peppermint oil. Hitherto the Russian Pharmacopœia prohibited the use of Russian peppermint oil in medicine, and only this year has its sale by pharmacists been allowed.

Trade Notes.

MESSRS. GEORGE WAUGH & CO., of 177 Regent Street, have been appointed chemists to H.R.H. the Duchess of Fife.

MESSRS. WRIGHT, LAYMAN & UMNEY intimate that their warehouse will be closed for stocktaking on Monday, June 29, and Tuesday, June 30.

MESSRS. ALLEN & HANBURY (LIMITED) announce that their warehouses, offices, and laboratories will be closed for stocktaking on June 29 and 30, and on July 1.

MR. JAMES TOWNSEND, the medical-label printer of Exeter and London, offers to the trade a pine-tree toilet-paper. The paper is made with serrated edges, and is put up in cardboard cases to sell at 6*d.* each. It is an attractive-looking article.

MESSRS. KAY BROTHERS, in view of the recent decision affecting their essence of linseed, are advertising for the return to wholesale dealers of all stocks of the article held by unqualified persons, and they request wholesale dealers to send in their stocks for exchange.

TOO SOON.—Mary: "Please, mum, the castors under master's armchair creak most terrible, hadn't they better be oiled?" Mrs. Moffat (newly married): "Certainly, but I'm afraid we have no castor oil in the house."

Legal Reports.

THE SALE OF KAY'S COMPOUND ESSENCE. ¹

Patent medicines only come within the Pharmacy Act exemption so long as the patent is in force.

In the Queen's Bench Division, on Saturday, Mr. Justice Cave and Mr. Justice Wills, sitting as a divisional court, had before them the case of the Pharmaceutical Society *v.* Fox, which raised the question as to the sale of articles containing poison, and for which letters patent had been granted, by grocers and storekeepers other than chemists. Mr. Bonsey was for the appellant (the defendant), and Mr. T. R. Grey represented the respondents (the plaintiff Society).

Mr. Bonsey, in opening, said that in an action brought against the defendant in the Westminster County Court the Pharmaceutical Society obtained judgment for a penalty of 5*l.* under the Pharmacy Act for selling an article which contained poison, the defendant not being a chemist. Under section 15 of the Act it was provided that any person who should sell or keep open a shop for retailing poisons, and not being a registered chemist, should be liable to a penalty of 5*l.* The question here was whether this was a patent medicine within the meaning of section 16, a qualifying clause. The facts were these. On May 31, 1873, letters patent were granted to a chemist at Stockport—Mr. Kay—for the manufacture of a medicine called "Kay's Compound Essence of Linseed." Ever since that medicine had been manufactured by Mr. Kay, and was sold by his firm to chemists, shopkeepers, or any person for retail. Three years afterwards the letters patent lapsed in consequence of certain fees not being paid. Under the Act then in force a fee of 50*l.* had to be paid. That not having been done, the patent lapsed. The question was whether a patent medicine under section 16 applied to a medicine for which a patent had been obtained, although that patent had expired, as no distinction was drawn between a lapsed patent and one which had expired.

Mr. Justice Wills: Is this a patent under the Patent Act?

Mr. Bonsey: Yes. The contention of my friend is that during the three years before the patent lapsed this would have been exempted by section 16, but as the patent is not, so to speak, in force, section 16 has now no application. The result will be, if my friend's contention is right, that letters patent may be granted to a man for the manufacture of medicine like this; he may manufacture it for fourteen years, and anybody may sell it, and it need not be sold by a chemist, but that after the expiration of that fourteen years it can only be sold by a chemist.

Mr. Justice Wills: Why on earth because a person gets a patent should that be allowed to be sold by anybody or everybody, when poison generally cannot be so sold? I can't understand that.

Mr. Bonsey said the object of the statute was stated in the preamble, which commenced "whereas it is expedient for the safety of the public that persons keeping a shop," and so on. Could it be said that for a period of fourteen years the Crown would grant a licence to a man to sell a thing which was a danger to the public, so long as he paid his fees, and at the expiration of that period would decline to allow it?

Mr. Justice Wills: I don't understand the connection between the two.

Mr. Bonsey argued that the distinction was that if a patent medicine had been patented the public were protected, and they were not required to be protected by the Pharmacy Act, for the reason that before the patent could be granted it had to be examined. The specifications were to be laid before the authorities, and if they were of opinion that this was dangerous or injurious to the public, the patent was refused. Moreover, the whole of the ingredients were disclosed in the specification, and anybody, by paying a very small sum, could go and ascertain for himself what the particular ingredients of the compound sought to be patented might be. Where a medicine had once been the subject of letters patent there was a sufficient protection without the restrictions imposed by the Pharmacy Act. The Legislature in various statutes drew a distinction between a patent "in

force," to use an expression which had been used in another Act, and one which had expired. Even in the Patent Acts a distinction had been drawn between a thing which had never been patented and a thing which had been the subject-matter of a patent, though that patent had expired. In the 5 and 6 William IV., chap. 83, section 7, there was a penalty imposed on persons who sold any goods marked with the word "patent"; but there was a proviso to the effect that nothing contained in the Act should apply to persons marking the word "patent" on goods which had been patented and the patent for which had expired. There the Legislature drew a distinction between marking an unpatented thing "patent" and describing it as patent when the patent had expired, and in the first case there was a liability under penalty for doing it. He (Mr. Bonsey) contended his friend was wrong in saying that when one found the word "patent" in the statute it meant patent in force. There was a stronger illustration in the recent Act analogous to the old one.

Mr. Justice Wills: It occurs to me that goes against your argument. So long as a thing is really a patent you know what it consists of. The moment it ceases to be a patent there is no security whatever, although sold under the name of a patent article.

Mr. Bonsey contended that in this case the materials were the same and the medicine the same. In this case no evidence was called.

Mr. Justice Wills: I assume it is the same, but I say there is no security that it is. It is pointed out that there is some security to the public by the Patent Act. Not, as you suggest, that the Crown can refuse if they think it was a thing not wise for a man to put in his inside, but for other reasons. The moment the patent has expired there is no security.

Mr. Bonsey, with great respect, said he could not see why the distinction was drawn for fourteen years. Of course, if a man liked to be fraudulent, and not manufacture the article in a satisfactory way according to the specification, he could do so.

Mr. Justice Wills: The patentee has an interest in the fact, you know.

Mr. Bonsey, continuing, said a patent medicine was a somewhat different matter. Take the case of a very simple machine which might be the subject of a patent. If anyone manufactured that afterwards according to the specification there would be no difficulty in seeing whether or not it was a machine or article under the patent. In the Food and Drugs Act there were words exempting drugs which were a proprietary medicine or the subject of a patent in force. Then, in a very similar Act, the Legislature had used the words "patent in force." Yet there were no words of that kind in the Pharmacy Act of 1868. In the case of the Pharmaceutical Society *v.* Piper, the question whether the words "patent medicine" in section 16 included proprietary medicines was raised, and in that case Mr. Justice Collins pointed out that mischief did not exist in the case of a patent medicine because anyone could find out the ingredients used; but the matter was altogether different when subject to a proprietary right. This matter was more fully dealt with in the exemption by section 16 in a subsequent case in the Court of Appeal—Pharmaceutical Society *v.* Armson—where the same point was raised. Having reviewed the judgments of their Lordships in the Appeal Court, Mr. Bonsey contended that though in the judgments in those cases the exact point did not arise, yet the learned Judges had clearly expressed the opinion that the object of this exemption clause was because the public were perfectly protected so long as the medicine was prepared according to letters patent, and where an exclusive right had been created to sell it. He submitted that when a medicine was protected and marked "patent," it was within the exception. In this case it was manufactured and prepared by an original patentee—Messrs. Kay—and had been ever since. There was, however, no question raised in the case upon that point. It was put to him by his friend on the other side there would be a difference between the case of a medicine being prepared by the original patentee and being prepared by anyone after the patent had expired. That was the point their Lordships had referred to on the question of protecting the public after fourteen years, when anybody could manufacture it. The only question here was whether, if the patent lapsed in 1876, the defendant was

prevented from taking advantage of the exemption section. If that was so, a great hardship accrued to the person who was the owner of the patent, as, after fourteen years, the article got into the hands of grocers, shopkeepers, and storekeepers all over the country, and now it was said, after the expiration of that period, every one of those people committed an offence, and was liable to a penalty, if he happened to have a bottle of the medicine in stock, although he might know nothing about the patent expiring or lapsing. For twenty years this medicine had been manufactured by Messrs. Kay, and sold without any objection by the Pharmaceutical Society. During that time they had had every opportunity to see what the compound was made of, and now, after twenty years, they had questioned the right of anyone but chemists to sell it. In the case of harmless preparations of this kind, which were useful and beneficial to the community, it was really a disadvantage to the public that they should not be able to obtain them at the village store or other shop. He could not contend that the mere fact of this having $\frac{1}{2}$ gr. of morphia among numerous other ingredients did not bring it within the statute, but he would point out that in interpreting the Act the only thing was to regard the safety of the public, and to see that the object of the Act was satisfied. Farther, that no undue restriction should be placed upon any trade, or any undue influence imposed upon the poorer and humbler members of the community.

Mr. Justice Wills: Your argument is once a patent always a patent.

Mr. Bonsey: For the purposes of this Act.

Mr. Justice Wills: That is an argument which seems to answer itself.

Without calling on the respondents,

Mr. Justice Cave said he was clearly of opinion that this could not be said to be a patent medicine, and the argument they had just listened to should properly be addressed to the Legislature to induce them to make a change in the law. As the law at present stood, it was perfectly clear the appeal must be dismissed.

Mr. Justice Wills concurred, and said as "patent medicine" meant a medicine for which there was a patent, and not one for which there was not a patent, the argument of once a patent always a patent answered itself.

The appeal was dismissed with costs.

Mr. Bonsey asked for leave to appeal, as the matter was of great importance to so many storekeepers.

Mr. Justice Cave: No; we decline to grant leave to appeal.

THE BOVRIL TRADE-MARK.

IN the Court of Appeal, on Friday, judgment was given in the appeal of Messrs. Rosetree & Co., of Canterbury, from a decision of Mr. Justice Kekewich, refusing to rectify the Trade-marks Register by expunging therefrom a mark consisting of the name "Bovril," registered by Mr. J. L. Johnston, and assigned by him to Bovril (Limited). Lord Justice Lindley said he was clearly of opinion that the word was capable of being registered. It was not descriptive, and could not, except by an ingenious suggestion, be said to indicate the nature of the article sold. It was, in fact, a fancy word not in common use, when it was registered. Lords Justices Lopes and Rigby concurred, and the appeal was accordingly dismissed.

THE POISONED FLESH PROHIBITION ACT.

THE case of Rogers v. Hull, which was heard before Justices Cave and Wills on June 13, was an appeal, by way of special case, from the decision of Justices at Leyton under the Poisoned Flesh Prohibition Act. The respondent was charged with having on December 13, 1895, knowingly placed upon certain land meat impregnated with poison and calculated to destroy life, but the Magistrates refused to convict, holding that the respondent had not committed an offence under the statute. It appeared that the respondent was a pigeon-fancier, and in consequence of the annoyance he had been subjected to by cats, he placed some poisoned meat in a pigeon-house in his garden for the purpose of killing cats. A neighbour's cat and his own collie dog ate some of the meat and died. Section 3 of the Act provides that nothing

in the Act should make it unlawful for an occupier of any dwelling-house or other building, or the owner of any rick or stack of wheat, barley, oats, peas, or any cultivated vegetable produce, to put or place, or cause to be put or placed in any such dwelling-house, or within such rick or stack, &c., any poisonous ingredients or preparation for the destruction of rats, mice, or other small vermin. In this case the pigeon-house was nailed to a wall in the respondent's back garden, and was about 5 ft. from the ground, and, therefore, it was argued, it was not on land within the meaning of the statute. Mr. Justice Cave said he was of opinion that the case must go back to the Magistrates with an expression of opinion on the part of the Court that they ought to have convicted. Mr. Justice Wills concurred.

THE SALE OF FOOD AND DRUGS ACT.

WEAK QUININE WINE.

AT the Wolverhampton Police Court, on June 10, John A. Caswell, chemist, Dudley Road, Wolverhampton, was summoned for selling quinine wine which was not of the nature and substance demanded. Mr. C. N. Wright defended. According to the statement of Mr. Allwood (Food and Drugs Inspector), some quinine wine purchased from the defendant's shop was found to contain only $\frac{1}{8}$ grain of sulphate of quinine, instead of 1 grain. The defence was that the wine was purchased from the firm of Bovril (Limited), the cask was labelled with the letters "B.P.," which were understood to mean British Pharmacopœia, and the wine was sold as received. The Stipendiary held that the label could not be regarded as a written guarantee within the meaning of the Act, and imposed a fine of 20s. and costs.

SALICYLIC ACID IN IPECACUANHA WINE.

AT the same Court, Charles Frank Lloyd, who trades as "Lloyd & Son, Homœopathic Institute, Darlington Street, Wolverhampton," was summoned for selling ipecacuanha wine containing salicylic acid, which was alleged to be a foreign ingredient under the formula of the British Pharmacopœia. Mr. Allwood, the Inspector of Food and Drugs, contended that salicylic acid would act as an irritant. Mr. Porter (Messrs. Glaisyer & Porter, of Birmingham) argued that the acid was useful for preserving the drug. Mr. Alcock, pharmaceutical chemist, Birmingham, said salicylic acid was an important preservative of wine, and in the quantity found was not deleterious. Mr. Walter Wheeler Heelas, M.R.C.S. and L.R.C.P., said the quantity of salicylic acid in this wine would not be injurious to anyone drinking it; and Dr. Bennett, Queen's Hospital, Birmingham, said it was impossible for any injury to be done to the health of any one by taking the wine with this amount of salicylic acid in it. The Stipendiary, however, held that chemists must dispense their drugs according to the formula in the Pharmacopœia. The salicylic acid was not in the formula, and a fine of 40s. and costs would be imposed.

IS "TOUS LES MOIS" STARCH ARROWROOT?

AT Ashford Petty Sessions, on June 16, Mr. W. G. Smith, grocer, was summoned for selling "tous les mois" starch as arrowroot. The constable who purchased the article said he asked for a quarter of a pound of arrowroot, for which he paid 5d. He did not ask for any special kind of arrowroot. Mr. Adams, of Maidstone, a public analyst, in his certificate, stated that the sample consisted of "tous les mois" starch, an article which was derived from a root of the same order as that from which true arrowroot was obtained. Mr. Adams added that there was no objection to the article being sold under its proper name, but it should not be sold as arrowroot. For the defence Mr. Bannon said this article was an arrowroot—and a well-known arrowroot. The Ashford Bench had had a similar case before them recently, and dismissed it. There were various kinds of arrowroot produced in various parts of the world, but they were all arrowroots. This kind purchased from his client was an Indian arrowroot, and was supposed to be the best. Mr. Smith obtained it from the merchants, who warranted it as being pure. The Bench, considering that this case was exactly similar to that heard by them in May, dismissed it.

THE ANALYST IS NOT THE JUDGE.

AT the Dartford Petty Sessions, on June 13, Mr. Frank Cox, chemist and druggist, of Swanley Junction, was summoned for selling 4 fluid ounces of spirit of nitrous ether to Police-constable Drowley, which Mr. Adams, the county analyst, certified was deficient of its active property to the extent of 68.8 per cent., and that the sample was, therefore, bad. Mr. C. C. Ridley, who defended, contended that the summons must be dismissed, upon the ground that the public analyst had prejudiced the case by inserting the word "bad" on his certificate, whereas it was not his duty to add any words as to whether the sample was good, bad, or indifferent. It was an error which public analysts had fallen into before, and the High Court had decided that it was an error which was fatal to the legality of the certificate. Besides, the certificate did not disclose the other necessary particulars on which the Bench could come to a decision, and he cited cases bearing out this contention. The Bench ruled that the certificate was bad and not in accordance with the law, and the summons was consequently dismissed.

COUNTY COURT CASES.

TOO LATE FOR THAT DEFENCE.

In the Westminster County Court on June 16, in the case of *Wilson v. Carter*, the plaintiff sought to recover a balance of account in respect of chemicals supplied to the order of the defendant, who was described as the proprietor of an ointment for the hair. The defence was that some of the goods charged had never been delivered, and consequently the defendant objected to pay for them. His Honour said he could not go behind the existing judgment, and made an order for payment of the balance by monthly instalments of 10s.

MUST PAY HIS TRADE DEBTS.

In the Westminster County Court on June 16, Mr. Woodward, a printer, applied for the committal of Mr. Fowler, a chemist, for non-payment of a judgment debt in respect of printing supplied. The defendant said he was formerly the proprietor of a small shop at Camden Town, but at present he was out of business and had no means of paying the claim. His Honour said the defendant must pay his trade debts, but under the circumstances he would make a new order for payment by monthly instalments of 10s. each.

DOCTORS' AND CHEMISTS' CHARGES.

In the Lord Mayor's Court on Wednesday, Dr. W. T. Peacock, a registered medical practitioner, practising at York Rise, Albert Road, Battersea, sued Mr. Levi, also residing in Battersea, for 14l. 17s. 6d. for medicine supplied to his order. The plaintiff bought his practice from a Dr. Gregor, one of whose patients at the time of the transfer was the defendant's daughter. After the charge the plaintiff continued to supply the lady in question with medicine from a prescription made out by his predecessor, and the present claim was in respect of the medicine so supplied, which was charged for at the rate of 3s. 6d. per bottle. The plaintiff said that this rate was a perfectly reasonable one. Dr. Gregor was called to corroborate his statement, adding that the charge was similar to that which he himself had made, and which the defendant had paid. The defendant, who conducted his case in person, said Dr. Gregor's charges included medical attendances, whereas the plaintiff had never seen his (defendant's) daughter. In these circumstances he contended that a reasonable charge for the medicine would be 1s. 9d. a bottle, or half the amount claimed. He made a payment into Court on that basis as being sufficient to satisfy the plaintiff's claim. He added that he had purchased precisely similar medicine from local chemists at 1s. per bottle. Cross-examined by the plaintiff, he said the quantity supplied by the chemist was exactly the same as that supplied by him (the plaintiff), and was made up from Dr. Gregor's prescription. It was not true that the medicine was deficient in strength, or that he had to give more of it to his daughter. He produced two bottles, each of the same size, and said one was the chemist's

bottle and the other the doctor's. He was willing to call the chemist if the Judge would allow him. He thought the plaintiff's charges were exorbitant. The learned Judge said that was often what patients said about their doctors' bills. The plaintiff had sworn that his charges were reasonable, and there was practically no defence to the action. The jury found a verdict for the plaintiff for the amount claimed, and judgment was entered accordingly.

SEQUEL TO THE HARMONY BORAX DISPUTES.

IN the City of London Court, on June 17, Messrs. Hooper & Batty, 15 Walbrook, E.C., sought to have Mr. A. H. Carpenter, late manager to the Harmony Borax Company, committed to Holloway for the non-payment of 7l. 12s. due for advertisements inserted in respect of the Harmony Borax. The defendant, on being ordered by the Court, said his present address was 26 Blackton Road, Rotherhithe. He was living on his father-in-law, and was out of employment. The Harmony Borax Company paid him 30s. per week and 10 per cent. commission, but he did not earn much commission. Mr. Commissioner Kerr: Has the company gone to grief? The Defendant: Yes. Mr. Commissioner Kerr: I thought so. The defendant, in answer to further questions, said he was with Aspinall's for five years, and had 2l. a week. He had since then carried on business with a Mr. King, but they failed, and the partnership was dissolved. He did not know where Mr. King was now. They had not been "through the Courts." Mr. Commissioner Kerr thought that if people could be "taken through the Courts" for, say, 2s., it would be much better than wanting 10l. as a preliminary fee. The defendant said he really had not anything. Ultimately, upon the defendant's consent, he was ordered to pay 10s. per month.

Bankruptcies and Failures.

Re FREDERICK JAMES LEA, 43 Tontine Street, Folkestone, Chemist and Dentist.

THE public examination of this debtor took place at the Canterbury Bankruptcy Court on June 12. Mr. Watts, solicitor, Folkestone, appeared for the debtor. It transpired that the debtor had not filed a statement of affairs. Questioned by the Official Receiver, he stated that he commenced business at Folkestone in 1882, purchasing the business from his father, who had carried it on previously for three years. He was to pay 400l. for it, by instalments of 5l. per month. He paid off the whole 400l. with the exception of 70l., which his father gave him. He was doing very well at that time, but he had since met with severe competition. He owed one creditor 400l., his total indebtedness being about 600l. His takings during the last two years had been from 400l. to 500l. The house formerly belonged to his father, but a short time ago he bought it for 800l., giving a mortgage for 500l. to Mr. Banks and for 300l. to his father. The examination was adjourned until July 10, debtor being ordered to render a cash statement for the past two years' trading.

The first meeting of creditors was held at the London Bankruptcy Buildings (for the convenience of creditors) later in the day before Mr. Worsfold Mowll, Official Receiver. Having called over the proofs, the Chairman observed that the sworn statement of affairs had not yet been filed, but he had a rough copy of the accounts, which showed unsecured creditors, 254l.; fully-secured creditors, 800l.; partly-secured creditors, 431l.; and assets, 930l. The fully-secured creditors held two mortgages for 500l. and 300l., referred to above; a partly-secured creditor, claiming 400l., held a mortgage over the debtor's reversion under the will of his grandfather; and another partly-secured creditor for 31l. held a life-policy for 200l. in the Prudential Life Office. The assets, according to the debtor's preliminary answers, included stock, machinery, fixtures, &c., 500l.; goodwill, 200l.; furniture, 200l.; book-debts, 30l.; and cash, 4s. The value of the goodwill was partly based on the proprietorship of the debtor in certain specifics—viz., corn-cure, cough-specific, neuralgia-mixture, and ointment. The failure was attributed to trade competition. The debtor had stated at the examination that morning that if the business realised

the price at which he had valued it there would be sufficient to pay all the debts in full. The gross takings of the business were returned at 600*l.* per annum; the gross profit was about 40 per cent. on the turnover; and the drawings for personal and household expenses had been 2*l.* per week. No offer was made to the meeting, and a resolution was unanimously passed for Mr. E. C. Moore, chartered accountant, 3 Crosby Square, E.C., to act as trustee and administer the estate in bankruptcy. The following creditors were elected as a Committee of Inspection—viz., Mr. Arnold Bai s (Baiss Brothers & Co.), Mr. George Robert Barclay (Barclay & Sons, Limited), and Mr. S. D. Hambrook. Messrs. Watts & Watts, solicitors, of Folkestone, attended the meeting on behalf of the debtor.

The principal creditors are:—

Unsecured.

	£	s.	d.
Barclay & Sons (Limited), Farringdon Street, E.C.	22	0	0
Bentley & Son, Tabernacle Street, Finsbury ..	10	0	0
Bourne, Johnson & Latimer, Farnival Street, Holborn	50	0	0
Hambrook, S. D., Folkestone	11	15	0
Jones, D. P. W., Folkestone	20	0	0

Fully secured.

Bank, J., Folkestone	500	0	0
Lea, J., Folkestone	300	0	0

Partly secured.

Baiss Brothers & Co., Jewry Street, Aldgate ..	400	0	0
(Security valued at 100 <i>l.</i>).			
Carlton Bank, Finsbury Pavement, E.C. ..	31	0	0
(Security-value not returned).			

Re JOS. HALL, 170 Amesbury Avenue, Streatham Hill, Brixton, London, late 14 Market Street, Wellington, Salop, Chemist.

THE following are creditors in this recent failure:—

	£	s.	d.
Adams, R. & T. J., Birmingham	11	13	11
Chemists' Mineral-water Association, Bristol ..	23	0	6
Edwards, B., Birmingham	350	0	0
Evans, Sons & Co., Liverpool	60	18	9
France, Hayburst H. Howard, Overley	332	0	0
Hearon, Squire & Francis, London	33	10	0
Jewsbury & Brown, Manchester	16	2	5
Lamb, Mrs. T., Westminster	76	8	0
Langton, Edden & Co., London	41	19	8
Maw, Son & Thompson, London	33	0	0
Payne, Geo., Manchester	50	0	0
Southall Brothers & Barclay, Birmingham ..	16	1	3
Sutton, W., & Co., London	205	0	5
Taylor, Miss E., Wellington	102	0	0
Zealley, A., Brompton	101	10	0

Partly secured Creditor.

British Equitable Insurance Company, London ..	106	100	
(Estimated value of security, 100 <i>l.</i> 8 <i>s.</i>)			

Re SAMUEL JOHNSON, Winehill, near Crewe, Draper and Patent-medicine Proprietor.

THIS bankrupt applied at the Hanley County Court on June 10 for his discharge. Judge Jordan, in making an order for immediate discharge, said the debtor had been driven into the Bankruptcy Court through a libel action going against him, and 250*l.* being awarded as damages. At the time of his bankruptcy he owed 1,065*l.*, and his assets realised more than 19*s.* 6*d.* in the pound, so that when he came into the court he was practically solvent. However, only 13*s.* 5½*d.* in the pound had been paid in dividend, showing that no less than 6*s.* in the pound had been expended in the administration of the estate by the trustee. The trustee was appointed by the creditors, and he had been extraordinarily lavish and extravagant in every way. He had disappeared, and nobody knew where he was. Had he been present he (the Judge) should have had something to say to him about his conduct. There was no fraud on the part of the debtor.

Re THOMAS FLETCHER (deceased), 131 Leek Road, Smallthorne, Chemist and Grocer.

A MEETING of creditors was held at Hanley on June 12. The statement showed gross liabilities amounting to 1,657*l.* 9*s.* 3*d.*, of which 789*l.* 3*s.* 6*d.* is expected to rank for dividend. The assets are estimated to realise 806*l.* 2*s.*, and there are preferential claims representing 47*l.* 17*s.* 9*d.*, the estimated deficiency being 101*l.* 19*s.* 3*d.* The Official Receiver said the statement of affairs had been lodged by the solicitors to the administratrix, and at a private meeting of creditors it had been intimated that the creditors wished to appoint a trustee. He had not incurred any expense in having an inventory and valuation made. He had, however, kept the business open and carried it on, pending the meeting of creditors. Mr. Geo. Ileson, of Macclesfield, was appointed trustee, with a committee of inspection.

Re WILLIAM HENRY HERN, 1 Spring Street, Hyde Park, Chemist.

THE first meeting of creditors under this failure was held on June 16 at the London Bankruptcy Court, before Mr. H. Brougham, Official Receiver.

The debtor, who filed his petition on May 26, commenced business in 1882 with 600*l.* capital, one-half of which was borrowed and has never been repaid. He called a private meeting of his creditors shortly before the failure and offered them a composition of 7*s.* 6*d.* in the pound. Whilst the creditors were endeavouring to come to a satisfactory arrangement the debtor found that a distraint would be levied, and he thereupon filed his petition at the court. The stock, trade-effects, and household furniture had since been sold by the landlord. The debtor attributes his insolvency to his expenses having latterly exceeded profits, interest on borrowed money, betting losses, and largely to loss through the sale of the stock and effects under the distraint. The accounts filed show total liabilities 857*l.* 1*s.* 2*d.*, of which 633*l.* 6*s.* 5*d.* are expected to rank, against assets 8*l.* 5*s.* 7*d.*, after allowing for the preferential claims. Mr. M. S. Rubinstein attended the meeting on the debtor's behalf, and, no offer being submitted, the case was left in the hands of the Official Receiver to be wound up in the ordinary course of bankruptcy. The debtor was directed to attend the court on July 9 for his public examination.

The principal creditors are:—

Unsecured.

	£	s.	d.
Barnett, H., Hart Street, W.C.	65	0	0
Browning & Co., 17 Spring Street, Paddington ..	10	0	0
Gibbs & Co., Finsbury Green	11	0	0
Hancock, Messrs., St. Austell	50	0	0
Hern, A., Fowey	30	0	0
Herring & Co., Aldersgate Street, E.C.	12	0	0
Idris & Co., Pratt Street, N.W.	80	0	0
Margeson & Co., Miles Lane, E.C.	12	0	0
Shove, G. H., Craven Street, W.C.	80	0	0
Sanger & Sons, Winsley Street, W.	37	0	0

Fully Secured.

London Life Association, King William Street, E.C.	100	0	0
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Partly Secured.

Hern, Miss, London	300	0	0
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Preferential.

Gilbert, W. S., Bayswater	60	0	0
Parochial rates	23	16	9

Re THOMAS GIBB, Widnes, Chemist and Metallurgist.

AT the Liverpool Bankruptcy Court, on June 12, before his Honour Judge Shand, Mr. A. G. Steele applied for the discharge of this bankrupt, who failed in April last. The Official Receiver stated that the debts of the bankrupt amounted to 5,238*l.*, and the net assets to 102*l.* The bankrupt had been for many years in business at Jarrow-on-Tyne. In 1883 he started a cement-manufacturing company, of which he was a director, and on behalf of which he gave guarantees, which now represented the bulk of his liabilities. The concern was a failure, and it was wound up in 1883, the bankrupt then entering the service of a company at Widnes

at a salary of 500*l.* a year. Not a single proof of debt had been received. He found that the assets were less than 10*s.* in the pound, and the bankrupt had incurred debts without reasonable prospect of payment. Mr. Steel applied for an unconditional discharge, laying stress on the fact that there was not a single proof of debt. The Official Receiver: I have no doubt that if I had declared a dividend of 10*s.* in the pound there would have been plenty. The bankrupt stated that immediately he filed his petition he had been discharged from his situation, and was not now able to make any offer. He had paid off 1,500*l.* of indebtedness in the last five years. His Honour said he had no alternative but to suspend the order of discharge for two years.

Gazette.

PARTNERSHIPS DISSOLVED.

Barrett, W. A., and Lanyon, E., Ford's Park, Canning Town, under the style of the City Glass Bottle Company.

Brumleu, F., and Brumleu, W., merchants, Mincing Lane, E.C., under the style of Charles Brumleu & Sons.

Fisk, C. B., and Reeves, F., toilet-requisite providers, Lincoln's Inn fields, W.C., under the style of E. C. Cassels.

Sykes, J. E., and Rushforth, W., aerated-water and cordial manufacturers and ginger-beer brewers, Southport, under the style of Sykes & Rushforth.

THE BANKRUPTCY ACTS, 1833 AND 1890.

RECEIVING-ORDER.

Robinson, James, Ulverston, surgeon.

ADJUDICATIONS.

Hern, William Henry, Spring Street, Hyde Park, W., chemist.

Kirk, Samuel William, late Wroughton, now New Swindon, Wiltshire, mineral-water manufacturer.

Rostant, André Arsène, Barking, late Stoway, Somersetshire, surgeon's assistant, late surgeon.

Senior, Joseph William, Barnsley, chemist, now out of business.

New Companies and Company News.

INDOL REMEDIES COMPANY (LIMITED).—Capital 5,000*l.*, in 1*l.* shares. Objects: To acquire, by purchase, from Henry Bamford, silk throwster, of 250 Halifax Old Road, Huddersfield, the patent and other rights and privileges to manufacture, prepare, and sell, wholesale and retail, a preparation known as "Indol," and to carry on the business of general and patent-medicine vendors. Registered without articles of association.

ICKE & CO. (LIMITED).—Capital 30,000*l.*, in 10*l.* shares. Objects: To enter into and carry into effect an agreement to be made with Thomas C. Icke, John H. Hilton, and Alfred Jones, for the acquisition of the business carried on by them, and to carry on the business of wholesale and retail confectioners, drysalterers, and chemists. The first directors are the three vendors. Qualification, 2,000*l.* Registered office, 261 Lawley Street, Birmingham.

FORBES, ABBOTT & LENNARD (LIMITED).—Capital 250,000*l.*, divided into 5,000 preference shares of 10*l.* each, and 18,182 ordinary shares of 1*l.* each. Objects: To enter into an agreement with John Abbott, James Forbes, Frederic Lennard, and Francis Ince for the acquisition of the business carried on as "Forbes, Abbott & Lennard," at Loudon, Shoreham, Rye, Greenwich, and elsewhere, and to carry on the business of chemical manufacturers and merchants, coal-owners, ironmasters, saltmasters, distillers, dyers, printers, gas and coke makers, miners, metallurgists, and chemical engineers. The first directors are John Abbott, James Forbes, Frederic Lennard, and Francis Ince.

GOODMAN'S (LIMITED).—Capital 100,000*l.*, in 1*l.* shares (of which 80,000 are preference). Objects: To acquire and take over as a going concern the business carried on in

London and the provinces by Lonis H. Goodman and Victor A. Goodman, to enter into and carry into effect an agreement with the said vendors for the purpose, and to carry on the business of dentists, dental surgeons, and manufacturers of and dealers in artificial teeth, and anatomical and surgical appliances of all kinds. The first directors (to number not fewer than three or more than five) are to be nominated by the subscribers. Qualification, 100 preference shares. Remuneration, 100*l.* each per annum, and an extra 50*l.* for the chairman.

MAXWELL, GREER & CO. (LIMITED).—Registered in Dublin on June 10, with a capital of 25,000*l.*, in 10,000 preference and 15,000 ordinary shares of 1*l.* each, to acquire the business of wholesale and retail druggists and general merchants of Maxwell, Greer & Co., Londonderry. The subscribers are:—W. Maxwell, Foyle Street, Londonderry, merchant; S. Greer, Foyle Street, Londonderry, merchant; H. B. Brandon, 3 Donegall Street, Belfast, accountant; S. Greer, Ballyshannon, married woman; A. Niven, Ballyshannon, widow; J. E. Maxwell, Myrtle Terrace, Londonderry, married woman; and A. H. Cunningham, Myrtle Terrace, Londonderry, druggist. The first directors are W. Maxwell and S. Greer. Registered office, Foyle Street, Londonderry.

LIEBIG'S EXTRACT OF MEAT COMPANY notify that an additional dividend for the year 1895 of 2*l.* 10*s.* per share, tax free, making, with the interim dividend 17½ per cent. for the year, will be payable on and after June 30.

MELLIN'S FOOD (LIMITED).—Twenty thousand 5*l.* preference shares in this company have been offered to the public this week. These shares are to bear a 6-per-cent. cumulative dividend and are issued at 10*s.* each premium. Mr. Mellin, the present proprietor, is to take the 100,000*l.* in cash and 150,000 in ordinary shares of the company for his property, including the freehold works, plant, goodwill, &c. The profits of the business for the past three years are certified by Mr. Athelstan Dangerfield, chartered accountant, to have been 20,065*l.* in 1893, 25,172*l.* in 1894, and 30,915*l.* in 1895. If the preference shares should be fully subscribed, it would appear that only the premiums (10,000*l.* altogether) will be available for working capital. Mr. Mellin is to be chairman of the company. The shares have been, it is reported, several times subscribed for.

MESSERS. ALLEN & HANBURY'S (LIMITED) have issued, through the London Trust Company, 4-per-cent. debentures to the amount of 35,000*l.*, being part of a maximum issue of 50,000*l.* debentures. The debentures are secured as a floating charge on the whole of the property and assets of the company. The object of the issue of the 4-per-cent. debentures is to pay off the existing 5-per-cent. debentures, and further to provide for the growing requirements of the business. Messrs. Wenham, Angus & Co., chartered accountants, the auditors of the company, certify that "their business has steadily increased during the last few years, and that the profit for the year ending June 30, 1895, was more than four times enough to pay the interest on an issue of 50,000*l.* 4-per-cent. debentures." The applications for the debentures are stated to have considerably exceeded the amount to be allotted, so that the list was closed on Monday.

Trade-Marks Applied for.

ANY person who has good grounds of objection to the registration of any of the following marks should at once communicate with Sir Reader Lack, Comptroller-General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

(From the "Trade Marks Journal," June 10, 1896.)

"ESSETS," and wording on fancy label; for chemical substances used for sanitary purposes. By A. G. Sharpe, 102 High Street, Battersea, S.W., merchant. 194,450. The essential particular is the word "Essets."

"ISON'S IZONENE," and combination of devices round label; for a medicinal preparation for the treatment of human eyes and ears. By T. Ison, 71 Great George Street, Leeds, oculist and aurist. 193,863. The essential particular is the combination of devices.

"GLUTOL"; for a powder to be sprinkled on bandages before they are used, being a chemical substance for medical and surgical use. By the Chemische Fabrik auf Aktien (vormals E. Schering), 170 Müller Strasse, Berlin, chemical manufacturers. 194,057.

"ANDREW'S LIVER-SALT," facsimile signature of applicant, and directions on oblong label; for a medicinal preparation for human use. By Andrews & Co., St. Andrew's Buildings, 4 Gallowgate, Newcastle-on-Tyne, manufacturers. 194,423. The essential particular is the signature.

"EO"; for chemical substances prepared for use in medicine and pharmacy. By the British Electrozone Company (Limited), 1 Northumberland Avenue, London, W.C. 194,666.

Portrait of man with head split open, and the words "For a Splitting Headache"; for a medicine for human use. By the Hop Bitters Company, 41 Farringdon Road, London, E.C. 194,718. The essential particular is the portrait.

"KALOCULINE," and circular device of nurse applying ointment to patient's eye; for an ointment for human use. By E. Donaldson & Co., 157 Church Street, Stoke Newington, London, N., manufacturers. 195,014. The essential particular is the device.

"SLEEPING BEAUTY'S" night-light, and figure of sleeping girl; for candles, being night-lights. By the British Candle Company, 19 Goodman's Yard, Minories, London. 194,421. The essential particulars are the device and the words "Sleeping Beauty's."

"AULD LANG SYNE"; for all goods included in Class 47. By J. Crossfield & Sons, Bank Quay, Warrington, soap manufacturers. 195,350.

Label bearing words "Albatum or White Rouge," with directions for use; for a polishing-powder. By Bradley & Bourdas, 6 Pont Street, Belgrave Square, London, S.W., manufacturers. 192,977.

"MARATANA"; for feeding-bottles. By F. Keller, 489 Dumbarston Road, Partick, by Glasgow, chemist and druggist. 195,002.

(From the "Trade Marks Journal," June 17, 1896.)

Device of buffalo horns; for glue. By the Grove Chemical Company (Limited), Crown Glueworks, Appley Bridge, near Wigan. 193,433.

Facsimile signature of applicant, and wording "Vegetable Ointment," &c., on round label; for an ointment for human use. By A. Porteous, 33 Ann Street, Glasgow. 194,993. The essential particular is the signature of the applicant.

"JUNO," and facsimile signature of applicant on oblong label; for a headache-powder. By J. T. Lincoln, 115 Great Thornton Street, Hull, pharmaceutical chemist. 194,996. The essential particulars are the word "Juno" and signature.

"CAMEO"; for a machine to hold a roll of paper. By the British Patent Perforated Paper Company, 92 Banner Street, Golden Lane, London, E.C. 193,437.

"BAYLEAF," and device of same; for edible fats. By Clarke's Pyramid and Fairy Light Company (Limited), Cricklewood, London, N.W. 194,159.

Facsimile signature of applicant on three separate labels with wording; (1) for kid-reviver, (2) tan-polish, (3) white cream in Class 50. The essential particular is the signature. 190,109, 191,716-7. Stellate design with the word "Oil" in centre for boot-polish. By W. Berry, the Diamond Oil Blacking-works, Rochdale Road, Manchester. 192,569. The essential particular is the design.

Personalities.

MR. W. A. STRATTON, the Pacific Coast representative of F. Stearns & Co., of Detroit, is in England on a visit.

DR. R. G. ECCLES, the well-known Brooklyn chemist, will arrive in England in a few days on a short vacation.

MR. ROBERT MCALLEY has returned from his South African journey on behalf of Messrs. Oppenheimer, Son & Co. (Limited).

MR. H. J. DAVENPORT, son of Mr. Horace Davenport, has been elected President of the Cambridge University Athletic Association.

MR. C. W. WHITE, Indian traveller for Messrs. Burgoyne, Burbidges & Co., has arrived home, and will probably spend a couple of months in this country.

MR. R. R. MARTIN, who has been in the East for Messrs. Oppenheimer, Son & Co. (Limited), arrived in London on Tuesday. The trip seems to have done him good.

It is announced that Miss Hilda Brunner, daughter of Sir John T. Brunner, Bart., M.P., of Druid's Cross, Wavertree, and Brunner, Mond & Co. (Limited), Northwich, is to be married to Mr. C. Harold Broadbent, J.P., of The Hollies, Latchford, Warrington.

MR. ANDREAS SAXLEHNER has received the Order of the Iron Crown (third class) from the King of Hungary, as a recognition of the work of his firm in promoting the popularity of Huayadi János water. The decoration was made on the occasion of the Hungarian millennium.

MR. J. G. PREBBLE, of Bombay, who has recently been travelling India on behalf of Messrs. Horner & Sons, is now in London, making additional business engagements. Mr. Prebble reports business in India as being satisfactory. He hopes to return to Bombay early in July.

MR. JAMES MCGREGOR, formerly of Leith, and now associated with his brother, Mr. Donald McGregor, as a principal of Bathgate & Co., chemists, Calcutta, passed through London this week on his way north to Edinburgh, where he will spend some time "on furlough."

IN Monday's *Daily Chronicle* there appeared a letter from a resident at Buluwayo in which the condition of the white community in Matabeleland was printed in extremely dark colours. The writer of the letter is an English pharmacist, who sent his communication to Messrs. Bourne, Johnson & Latimer, of Farnival Street, E.C., in order to obtain publication of it in Britain, "for," he writes, "it would be useless my sending any contribution from here to a newspaper; the letter would be opened and destroyed. We are having a terrible time of it here. Business is practically suspended, and half the people are in a state of destitution. The goods you sent last autumn have never reached me, nor can I trace them." Making allowance for the evidently very bitter feelings of the writer against the Chartered Company, it seems clear that Buluwayo is not at present a place to be recommended to an enterprising pharmacist in search of fortune.

A CROW'S GOLDEN NEST.—In the Madras Museum there is a crow's nest constructed out of wires of soda-water bottles picked up by the birds from a waste-heap. That architectural feat of bird-life has recently been eclipsed, however. For some time it was found that quantities of gold, silver, and steel spectacle-frames disappeared unaccountably from the shop of Messrs. Laurence & Mayo, at Calcutta. Workmen were suspected and watched, but all to no purpose. A few weeks ago, however, the overseer of the workshop heard the flapping of birds' wings, and, looking up, observed a crow flying off with a spectacle-frame. The bird was traced to the roof of a neighbouring building, where it was found to occupy a nest entirely constructed of spectacle-frames. The design of the gold and silver structure was so ingenious, and it presented such a beautiful appearance, that it was decided to keep it intact for a time, and before the materials were unwoven and separated a photograph of the nest was taken. Eighty-four frames, of the aggregate value of about 500rs., had been used in building the nest.

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Editorial Comments.

THE PHARMACY ACT AND PATENT MEDICINES.

It is difficult to assign limits to the ingenuity of lawyers or to the passionate persistence with which grocers cling to their desire to sell poisonous medicines, but, with due regard to these factors, we are disposed to fancy that the final decision on the subject has been given in the very confident High Court judgment in the case of the Pharmaceutical Society v. Fox, which we report this week. By several

prosecutions, notably by two instituted by the Treasury—the first having reference to a congh-linctus containing morphia, heard at the Mansion House, and the second being the well-known chlorodyne case—it was established that proprietary medicines containing scheduled poisons were not exempt from the regulations in respect to labelling. This was always so obvious that it is a wonder it could have ever been doubted. But the more delicate question remained whether the exemption as to the making and dealing in patent medicines provided in the 16th section of the Act applied to all the articles commonly so-called or only to articles which actually had been patented. Judgment in favour of the latter view was given in the Piper case in 1893, and this was followed by several other defences in the hope of finding how much poison grocers might sell. They got it settled in one of these that they might supply an infinitesimal quantity, but that was a little vague, and it ultimately appeared that if the bottle contained as much as could kill a baby they might not sell it. Still, they clung to the hope that they could patent poisonous compounds and then sell them, and it cost the would-be patentees a good bit of expense and a dozen Chancery suits to learn that this by-path was to be closed to them. There remained then only the poisonous medicines which had been patented, and Kay's essence of linseed was about the only one of these for which there was any demand. This mixture was patented twenty-three years ago, and her Majesty's authorisation of the exclusive right to the process for preparing it remained in force for three years. This, it was contended, made it a patent medicine, and therefore legitimately saleable by unqualified persons for ever. The reason why patent medicines might be sold by anybody, it was contended, was that their composition had been made known, and had been approved by her Majesty's Government or by some official authorities. This argument was a little too thin to put before the Judges, and it has utterly failed. They hold that the words "patent medicines" mean medicines for which a patent is in force and nothing else; and by that decision they drive the discomfited grocers from their last ditch, and take from them their last biscuit.

Criously enough, nearly all judicial interpretations of the Pharmacy Act have been in the direction of establishing that that Act meant exactly what it said—nothing more and nothing less. Many sneering things have been said about it in the past by eminent authorities, but, as we now know it, the Act appears to have been drafted with singular skill. It is true that the decisions have not always been just what chemists would have liked them to have been, but it may be that they went as far as the Legislature intended they should. In the famous company case, for instance, where it was held that the Act only said persons, and that it was not justifiable for the Courts to extend the meaning to companies, it must be admitted that the subject had never been contemplated by the Members of Parliament who passed the Bill. As to the penalty on the unqualified person who "sells" a poison, and as to the meaning of the term "patent medicines," pharmacists themselves for twenty years or more assumed meanings in those phrases, one less, one more than the words were actually capable of bearing. The Courts have read the sections exactly as they stand, and have found them reasonable, and they are settled law to-day. We should hardly care to assert that the reference to patent medicines in the 16th section of the Act has been interpreted in the way it was meant by its authors; but we are sure it has been interpreted in the way best adapted to ensure the public safety, and certainly in strict accordance with the English language. In the first Bill drafted by the Pharmaceutical Society in 1846 the exemption clause first appeared, but

then it was expressly applied to "patent or stamped proprietary medicines." This clause, modified to the form in which it now figures, was copied from Bill to Bill; but the proprietary-medicine people do not seem to have troubled themselves to get it made sufficiently comprehensive when the Act passed in 1868 was under discussion.

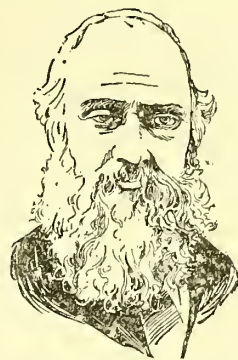
A BRILLIANT FAILURE.

THE world of science has this week been doing honour to one of its master minds—William Thomson, now Lord Kelvin of Largs, who for fifty years has occupied the chair of natural philosophy in the Glasgow University, and is still as active in mind as he was in 1846, when, as a youth of 22, he first donned the professorial gown. It is difficult to realise that by that time William Thomson's name was known far and near as that of a brilliant investigator, for we have been accustomed to associate him with those achievements in electrical science which have specially distinguished this half of the nineteenth century. Thomson's work really began when, as a lad of 17, he left Glasgow for Cambridge University. He entered at once upon mathematical and physical investigations, ignoring at first the examination honours which he had only to exert himself to secure, but, happily, indulging in those athletic recreations which English universities have been foremost in encouraging, and to which some measure of Lord Kelvin's robust health at 72 is traceable. From Cambridge Thomson went to Paris, studying under Biot and Regnault; then came the vacancy in Glasgow University, to which he was appointed, and his *Alma Mater* had the unique distinction of having a father and son as professors simultaneously, Lord Kelvin's father, Dr. James Thomson, at that time occupying the chair of mathematics.

It is impossible for us to refer in detail to Lord Kelvin's achievements in electrical science. It is universally known that he is the father of ocean telegraphy; and it was a fitting tribute to his genius that on Monday evening the great submarine telegraphic companies had the Bute Hall of the Glasgow University in touch with the world's centres of civilisation, and congratulations were figuratively and literally pouring in from all ends of the earth—for were not these messages traced by the faint streams of ink flowing from the famous syphon-recorder? Yet the very next evening Lord Kelvin was saying to as distinguished a gathering as ever met—

When I think how infinitely little is all that I have done I cannot feel pride; I only see the great kindness of my scientific comrades, and of all my friends, in crediting me for so much. One word characterises the most strenuous of the efforts for the advancement of science that I have made perseveringly during fifty-five years; that word is failure. I know no more of electric and magnetic force or of the relation between ether, electricity, and ponderable matter, or of chemical affinity, than I knew and tried to teach my students of natural philosophy fifty years ago in my first session as professor.

This is not pessimism. All who have come under Lord Kelvin's influence know his extraordinary power of inciting activity in others, which is the most distinctive influence of the optimist. The utterance is a plain statement of fact in regard to one side of the philosopher's life. He has



been a worker and a thinker, or, as some might prefer to put it, a man of business and a man of science, and while as a worker the products of his mind are monumental, as a theorist or thinker he has not solved the mysteries which some are content to leave as insoluble in this life. But in rescuing science from the crudities of past centuries there is no greater worker living. It was largely through his influence that the dynamical theory of heat was placed on a sure foundation. This brought him into contact with Joule, and together they perfected the latter's conception of the dissipation of energy. To Lord Kelvin we also owe the vortex-ring theory of matter, which is the most understandable reply to the problem of matter which has ever been given to the world. It simply means that matter is force localised in space in the form of a ring, perpetually in vortex motion; and this conception Lord Kelvin was wont to push to its extremities, going so far as to say that all things, even man, are elaborations of the primary ring. Latterly he has been rather silent about it, perhaps because other physicists find that the vortex ring is not capable of standing the strain of the twistings and turnings which organic chemists are prone to put it to, which may be their fault and not the ring's inclination. Besides these generalisations, Lord Kelvin has offered expositions regarding the universal ether which have paved the way for many an investigator; and he was one of the first to appreciate the Röntgen x -ray theory, which, indeed, is an outcome of work done long ago by himself. He has called a halt to geologists in their wild theorisings as to the age of the earth, maintaining that physical phenomena must be reckoned with as well as geological strata. According to him, the earth is somewhere between 20,000,000 and 100,000,000 years old, which is near enough for all practical purposes, while it is comforting to know that under present conditions the earth will last for another 10,000,000 years. Not his least service has been the controlling influence which he has exercised upon scientists in those speculations regarding the origin of life which undermine faith and "make cowards of us all." The stern school in which William Thomson was nurtured may account for this characteristic; but the rule of his scientific work has always been that speculation should be circumscribed by experimental data, and it was in this spirit that he said five-and-twenty years ago: "Overpoweringly strong proofs of intelligent and benevolent design lie around us, and if ever perplexities, whether metaphysical or scientific, turn us away from them for a time they come back upon us with irresistible force, showing to us through Nature the influence of a free will, and teaching us that all living things depend on one everlasting Creator and Ruler." It is the man who uttered these words whom the scientific world, without respect to section or race, has this week been honouring, and who, except himself, regards his work as a failure?

ALKALI AND ITS INFLUENCE.

THE thirty-second annual report on alkali, &c., works, for 1895, which is published this week, is the first one from the pen of Mr. R. Forbes Carpenter, who last summer succeeded Mr. A. E. Fletcher as chief inspector, and it is further notable in being the first to show that the Solvay process has outrun the older Leblanc one in the production of alkali. Mr. Carpenter has almost rigidly adhered to his predecessor's style of reporting, though, perhaps, a larger measure of praise is served out to the men who work under him; indeed, there is a tendency to glorification of their work, and of the beneficence of the Alkali Act, which is not unwelcome, and which the facts recorded certainly justify. For if there has

ever been justification of so-called grandmotherly legislation, it has been in these Acts, which have brought to the manufacturers profits undreamed of when the State stepped in to control their working. Indeed, the sole prop of Leblanc works at the present time is the hydrochloric acid, which was mostly turned to waste before the first Alkali Act declared that this practice was prejudicial to public health. There are other indications in the present report that inspection has a direct influence in effecting improvements upon processes which are to the ultimate benefit of manufacturers, although the immediate object is to keep down gaseous and liquid emanations abhorrent to the public.

There are few industries which have undergone such a complete revolution as the alkali industry has experienced during the past twenty years, and there is almost a pathetic interest in Mr. Carpenter's short table showing the salt decomposed in the United Kingdom for alkali-making during the past three years. It is as follows:—

	1895	1894	1893
	Tons	Tons	Tons
Leblanc process	408,173	434,298	467,562
Ammonia-soda process	428,614	361,603	349,609
Total	836,787	795,901	817,171

It was in 1875 that Messrs. Brunner, Mond & Co. introduced the Solvay process into this country. That year they decomposed about 3,000 tons of salt, which figure has now risen to 428,614 tons! As frequently happens with the cheapening of production, the consumption of the material has very largely increased. Thus in 1885 the total salt decomposed was 713,128 tons (598,096 by Leblanc makers and 115,032 by ammonia-soda makers). So that while visions of dismantled works and idle men may be conjured up for us, the fact remains that increased production means employment for more men, and that the fittest works have survived. There is no indication in Mr. Carpenter's report of any appreciable change in the near future of the character of the output through the adoption of the electrolytic method. He mentions that the Electrochemical Company's works at St. Helens for working Holland and Richardson's patents "were hardly in complete operation at the close of the year," or, as the local inspector puts it, "Owing to an unfortunate series of accidents to the machinery for driving the dynamos, regular work has been much interfered with, consequently any items of interest which the proprietors may see fit to supply for publication must be deferred"—which does not forebode a bright future. The Castner-Kellner Alkali Company has acquired land at Weston Point, near Runcorn, and will be engaged in the erection of a large plant to work the Castner-Kellner patents, which have "been proved on the manufacturing scale by the experimental plant erected at Oldbury and worked for a considerable period." Reference is also made to the Hargreaves and Bird process, and this is the extent to which, so far, electricity has carried us in the practical production of alkali. Until the chief inspector is able to add an electrolytic line to the table quoted above we cannot reckon upon the process as commercially important, interesting though it may be from the technical point of view. The references in the report to the Leblanc process are chiefly a tale of intermittent work in all but a few factories, and a struggle to get the most out of the hydrochloric acid in the shape of bleaching-powder. It is a mere platitude to say nowadays that the United Alkali Company make alkali because the loss in treating salt cake

as waste would be greater than the loss on it as alkali. So they have started the plan of working most of their factories intermittently—a policy so disastrous to labour as well as capital that a few years will see the end of it, for the older and worn-out factories must join the ranks of the dismantled, and the work be carried on continuously in the best of the factories which remain.

The report contains many points of technical interest which cannot be adequately treated in this place, but we may mention briefly Kessler's process for continuous concentration of vitriol which is at work in Scotland; the improved method of dealing with sulphuric vapours in use at Venetian-red works, this consisting in passing the gases through a tower packed with scrap wrought iron down which water trickles, so that iron sulphate is regenerated; two or more methods for removing ammonium sulphate in an economical and clean way from the saturating-tanks and the troubles which are arising from "devil gas" in ammonia-works, that gas containing evil-smelling pyridine, which almost defies removal. These matters are of special interest to the technical chemist, and are fully dealt with in the report. We may also mention the troubles arising from tank-waste, and the methods of treating it, about which Mr. Carpenter and his assistants report many interesting observations.

The principal matter of economic interest in the report is the wonderful progress in the use of chemical manures Mr. Alex. Cross, M.P., Chairman of the Chemical Manure Manufacturers' Association, states that this country now produces nearly 1,000,000 tons of superphosphates annually Germany 800,000, France 750,000, Belgium 300,000, Denmark and Holland 200,000, Italy 50,000, and the United States 1,000,000 tons; altogether 4,000,000 tons, of the value of 10,000,000*l.* sterling. In addition to that, nitrates are used to the value of 8,000,000*l.*, ammonia to the value of 2,500,000*l.*, and other chemical fertilisers bring up the total expenditure annually in chemical products for restoring the land to between 22,000,000*l.* and 23,000,000*l.* sterling.

The recovery of ammonia goes on steadily in this country. Last year 179,651 tons of sulphate, valued at 1,500,000*l.*, were produced, this being an increase of almost 20,000 tons over the year preceding. Gasworks produce about two-thirds of the amount, and, in spite of low prices, it is anticipated they will continue to increase their production. Iron, shale, and coke works produce the rest, and increasing attention is paid to the subject by them. Here is a significant reference to the matter by the chief inspector:—

In one works I visited I found the furnace-gases, after extraction of the ammonia and tar, supplied all the heat necessary in the ironworks for heating the blast and for steam-raising, for the distillation and working-up of the tar and ammonia produced, and a surplus was left for use in a large adjoining steel department. Formerly that portion of the gases unutilised for the operations in the ironworks left the mouths of the blast-furnaces in huge sheets of flame.

These are the "blazes" which many patriotic Britons have regarded as a sign of their country's greatness, and which ere long will be a thing of the past; in fact, the lurid gold of the horizon is rapidly being converted into more solid gold. Benzol is the last thing to be extracted from these flames. Belgium and Germany get 1,000,000 gallons of benzol every year from their ironworks, and our ironfounders are beginning to see money in it. In view of prevailing low prices, it looks senseless to push the recovery of ammonium sulphate too far, but Mr. Carpenter points out directions in which it may be utilised. The first is in the cultivation of beet. In respect to that we have to destroy the farmers'

bogey, "exhaustion of the soil." Beet is a soil-exhausting thing, and the farmer has not yet learnt the trick of supplying the soil with exactly those things that he has taken out of it, or, in other words, sowing shillings and reaping sovereigns. Chemical manures will do this for him. Attention is also called in the report to the manufacture of glucose from starch derived in its turn from potatoes. We imported 500,000*l.* worth of glucose in 1894. While on every 100 acres of cultivated land in Great Britain only 1½ acres are devoted to potato cultivation, 11½ are similarly devoted in Germany, and much of that is used in making starch and potato spirit. "Great expectations," says Mr. Carpenter, "may reasonably be entertained of the success of this industry if established here, as the yield per acre of potatoes is much greater in Great Britain than in any continental country. A factory is about to be erected in Fifehire for the manufacture of potato starch."

We like that last sentence about the Fifehire factory, for it is an indication that what with us is a moribund industry is beginning to improve. Mr. Carpenter appears to be unaware that this country at one time was ahead of all others in the manufacture of potato-starch, but several potato-famines and much speculation in the homely tuber have helped to ruin it. There are still a sufficient number of factories in the country to produce the half-million pounds' worth of glucose referred to, and plenty of labourers in country districts ready and willing to begin their old work at moderate wages. The only thing needed is potatoes.

THE COMING OPIUM-CROP.

ALL over the opium-growing districts of Asia Minor the farmers are now busy gathering the juice of the poppy, which, next to quinine, is the most important drug of our generation. The various gentlemen, all of them thoroughly acquainted with the business, who keep us informed of the condition of the opium-market in the principal trading centres of Turkey, are singularly unanimous in reporting that harvesting is proceeding under the most favourable auspices. Nevertheless they, with one uncertain exception, appear to incline to the belief that the yield in Asia Minor will be rather below the average of recent years, while as for Salonica, the view is unanimous that instead of a 1,000 or 1,200 case crop, such as we have more than once received from that district within recent years, a meagre 300 or 400 case crop is the best we can hope for in 1896. One of our informants, who appears to take an unduly depressed view of the position, estimates the entire crop at about 3,000 cases; another writes of 4,000; yet another of a possible maximum of 4,500 cases. Even the highest of these figures, however, is much below the yields with which we have repeatedly had to deal during the last decade. Various reasons are assigned to account for the lowness of these estimates. Spring frosts have probably caused a certain amount of damage, especially in European Turkey; and it is said that, owing to the high prices which have ruled last year for certain other Turkish products, coupled with the undeniably depreciated condition of opium, the acreage under poppies has been reduced. The Armenian troubles and the general state of insecurity, bordering on anarchy in many districts, may also fairly be held as likely to have prevented so large an output as might normally have been looked for; and whatever the causes, we appear face to face with the probability that the production of opium in Turkey will this year be far from sufficient to supply the world's requirements of medicinal opium for a twelvemonth. There can be little doubt that the consumption of the drug has greatly increased within the past ten

years, but so, to be sure, has the production. The output of opium in European Turkey has probably doubled within that period, and new experimental plantations are continually laid down in parts of Macedonia, Albania, and Bulgaria that have never before been known to grow opium. Only a few weeks ago we called attention to certain investigations, which showed that Bulgarian opium has been found extremely rich in alkaloids. It is clear that agriculturists in many parts of the Balkan Peninsula are in earnest in their determination to become producers of a high grade of medicinal opium; and within a very few years we shall, in all probability, have to reckon seriously with these new sources of supply when reviewing the position of the market. For the present, however, we need not digress further in that direction. Attention must also be called to the fact that Persia is becoming a larger opium-producer every year, and may soon throw Turkey in the shade. Persian opium, moreover, is of high quality, and, for certain purposes, realises a much better price than the Turkish drug.

To return now to the crop-estimates of which we wrote above, the probability would seem that, under normal conditions, the price of opium is not likely to suffer a decline. If we can rely upon the statements of gentlemen intimately connected with the business, the stock of opium in London is smaller than it has been for years; but as these gentlemen are themselves responsible for the withholding of official returns relating to the movements in opium, we may receive their statements with respectful reserve. At any rate, it seems true that there are few sellers at the present market-prices, which range from 11s. to 12s. 6d. per lb. for soft-shipping (the kind consumed mainly by the Chinese in tropical America for smoking purposes), and from 8s. 6d. to 9s. 6d. for morphia-makers' and druggists' grades. The position generally appears a sound one, and if we were not at present in the depth of a general depression in the crude-drug business (a depression of greater extent than has been known this generation), there is every reason to suppose that in our trade report the article would be described week by week as "brisk and advancing" instead of "dull and unchanged." In the United States trade seems in a fairly satisfactory condition, and there are no prospects of serious political or economic disturbances. That is a factor of great importance in the opium-trade, for the States are the predominant partner in determining the course of the opium-market. When the agents for the Philadelphia morphia-makers step into the market in Smyrna, or Constantinople, or London, there is a flutter in the opium-trade. This spring they have bought pretty heavily in Turkey, and, although they always cut the dealers to the bone, their appearance is usually the sign for an upward movement. There is said to be very little stock of opium in the States. In Turkey there are, it is believed, about 3,300 cases, which is not an alarmingly heavy supply. In Smyrna the opium-prices are now on a parity of from 8s. 6d. to 8s. 9d. per lb., according to quality, but there is a prospect that the first quotations of the new season will be a good deal higher than these figures. The weak spot in Turkey is the large number of small and impecunious holders. Credit is low in the Sultan's realms and ready money is scarce. The speculators' or dealers' need is the wealthy buyers' opportunity, and that is why American and other buyers who dispose of plenty of funds never have any difficulty in depressing the market whenever they want to buy, no matter how healthy the position of the drug may be from a theoretical point of view.

BARGAIN-NUMBER.

Our publisher wishes us to call attention to the fact that the next issue of our coloured Supplement will be a bargain-

number, and that will be a good opportunity for many in the trade to get rid of old proprietaries, apparatus, shop-fittings, &c., for which they have no immediate use. It is certainly cheaper to get rid of them at a sacrifice in price, than to give them shop-room, and we do not know any better means of doing that than by advertising in our old established and lately rejuvenated exchange-column.

MEDICAL-OFFICERS FOR THE ARMY.

In consequence of the way in which the fighting-men of the army treat the non-combatant medical-officers, the boycott to prevent young medical practitioners from entering the competition for positions is becoming more stringent. It is reported that there will be no English and Scotch candidates for this summer's vacancies, but there appears to be some coquetting between Dublin medical schools and the War Office, which may break up the boycott.

£100 A WEEK.

The London correspondent of the *Manchester Evening News* must be a more simple-minded individual than are most of his brethren of the Press. Pharmaceutical chemists in London, he says, have been doing an extraordinary trade in "iced lemon-syrup and saline," at the rate of 2d. per glass, during the hot weather. One chemist admitted to him that his net profit last week from this source alone exceeded 100%. And then this envious correspondent does his little best to burst up this magnificent harvest. He is good enough to approve of the trade to the extent that it diminishes the consumption of alcoholic liquors, but, he solemnly adds, "the rage for acid drinks, even when nominally neutralised by an alkaline addition, has its physical dangers, and it is greatly to be desired that some simple and categorical pronouncement should be made by a physician of unimpeachable repute. When persons in health habituate themselves to the use of drugs day-by-day, they are sapping the foundations of their constitution." Sapping the foundations of a constitution with lemon-syrup is a new terror; but we trust the nation will submit to a good bit of sapping if it will bring in 100% a week to deserving chemists.

QUININE WINE.

"This agreeable tonic is very largely used, particularly in warm and enervating climates. It is composed simply of sulphate of quinine and some light wine. Often the wine used is a light white wine of the hock or sauterne type. This reduces the medicinal value of the preparation, according to some authorities, who hold that quinine should always be combined with the more astrigent and blood-making red wines. The Hungarian clarets, for instance, which contain large quantities of iron, should make excellent media for quinine. These wines are sold at low rates on the London market. In labelling quinine wines, plain directions ought to be printed, setting forth the right time for taking the tonic. Taken before dinner, for instance, quinine wine is a most excellent tonic and appetiser; taken after the meal, it injures digestion, and does far more harm than good; taken in the early morning on an absolutely empty stomach, it is very likely to cause headache. Before lunch and before dinner are probably the best times for taking it. Warnings should also be given against using it in any but the strictest moderation, as it is a very powerful tonic."

We quote the foregoing from the *Mineral Water Recorder*. It reads so well that, if one did not know of the existence of a British Pharmacopoeia, and a Sale of Food and Drugs Act, it might be thought that the information given is most pharmaceutically erudite. If there is any man in creation who has seen quinine wine made from hock or sauterne, we should like to see his portrait.

"2d. oil of jupiter, 2d. of sweet neiter, 2d. acqujeva." If this recipe (which comes to us from Paisley) should be submitted elsewhere, it may be well to explain that bals. copibe and not aqua pura is meant by the third ingredient.

Professor Attfield, F.R.S.

SHORTLY after the announcement of his resignation, a member of our staff saw Dr. Attfield taking his luncheon in a famous restaurant. The Professor looked so cheerful that the humble journalist ventured to seek a seat at the same table with him, and the result was a pleasant series of reminiscences of the thirty-four years during which Dr. Attfield has filled such a prominent position and done so



PROFESSOR ATTFIELD, 1862.

much useful work in the direction of educating the present generation of pharmacists.

Dr. Attfield's cheerful appearance could hardly be traced to his lunch, which was scarcely that of a gourmand. Probably it was largely due to the much better health which he seems to have acquired; indeed, he claims to have pretty well overcome the dyspepsia which vexed him a great deal a few years since. But his conversation seemed to suggest that the prospect of his early retirement—at all events from educational work—was by no means an unwelcome anticipation. That such work has been congenial to him needed no assertion; but that after thirty-four years it may have become a bit monotonous is conceivable.

"And in those thirty-four years do you know how many pupils you have taught, Dr. Attfield?"

"Yes; it happens that I had occasion to count them up only a day or two ago, for I always kept exact records, and I found that they numbered 2,367."

"What average period do you reckon they studied under you?"

"I should think about seven months per man, but I could not give that exactly without a great deal of examination of data."

"Besides these, how many students have had 'Attfield' for their guide in various parts of the world?"

"At least fifty thousands, at the rate of one book one man, each such student being, I trust, firstly brought abreast of the chemical science of the day, and, secondly, taught chemistry in relation to pharmacy."

"Are students improving or deteriorating in quality, do you consider?"

"Before I answer that, I must remind you that the students in my early days were men who came to study not chiefly for the purpose of preparing for examination, but because they wanted to learn; they were all, as you may judge, the best men in the calling. Now, and since the year 1863, the majority of those that come want to get through their examinations as soon as they can. Of course, we teach them all we can; but it is obvious that the average standard must be lower."

A FEAT OF MEMORY.

"Do you remember all those 2,367 students, Dr. Attfield?"

"I fancy I could remember most of the names, and also

could recognise most of the faces; but I don't say I could correctly connect faces and names."

"Do you remember me in the laboratory?"

This rather staggered the Professor. The obvious reply was that with all its defects the School of Pharmacy could hardly have turned out such a failure, but politeness forbade such a rejoinder. Dr. Attfield searched his memory for a minute, and then he acknowledged that he could not recall our representative as a student.

"No," said the *C. & D. man*; "you are quite right. I missed my chance. I never was there."

"Ah! but," said Professor Attfield, "I remember your first call on me. It was a great many years ago. I remember where you stood in the laboratory, and what you said."

It was quite true. Thirty-one years ago, almost to the day, the present interviewer called on Professor Attfield and caged some information from him in the way hinted at. Among many subsequent misdemeanours this little one had almost got buried out of sight. But a memory like that of Dr. Attfield does not give the ordinary culprit a chance.

REMEMBERS ALL THE PROFESSORS.

Then the conversation ran to reminiscences. Dr. Attfield remembered, as a schoolboy, having been taken to two or three of Fownes's lectures before he had any association with pharmacy. Subsequently he attended two or three of Pereira's lectures. He also heard Dr. A. T. Thomson lecture on botany, and as a student he took the only two medals in the four subjects, after studying under Redwood and Bentley.

When he himself was appointed, in 1862, director of the laboratories and afterwards professor of practical chemistry, Redwood and Bentley were the respective professors of chemistry and pharmacy, and of botany and materia medica. So that the retiring professor links together more or less intimately the whole succession of professors at the School of Pharmacy.

AT THE PARTING OF THE WAYS.

We do not propose now to write an account of Professor Attfield's career. Halfway through that career—namely, on May 15, 1874—we published a notice of him and



PROFESSOR ATTFIELD, F.R.S., 1896.

(From a photograph by Barraud (Limited) 263 Oxford Street, W.)

a portrait, which may be compared with those we publish to-day. He has done, as we all know, a great deal of work for both chemistry and pharmacy, and now with more abundant leisure he may do more. Previous to his appointment to the professorship which he has so long held, Dr. Attfield had been through a pharmaceutical apprenticeship, and had subsequently filled with great diligence the positions of assistant to Dr. Stenhouse, the professor of chemistry at St. Bartholomew's Medical School, and, later,

for five years that of demonstrator of chemistry at the same school, under Dr. Frankland. It was this scientific training, superadded to his pharmaceutical qualifications, that gained for him the favour of the Council when he competed for the professorship. Crookes, Mathiessen, and Henry Watts were among the other candidates for the post.

"And what of the future?" was a closing question put to the Professor.

"I hardly know what I shall do," was the reply. "I shall be glad of more leisure; at the same time I should be sorry to sever myself from all my old friends and the connection I have made as a consulting chemist. Of course, the continuance of my practice would mean having a laboratory and someone to look after it in London, which would involve some trouble, and further work is not necessary for me. Some three or four friends have left me money, besides what has come in other ways. But still I think I shall want some professional occupation."

"And have you any opinion as to the feasibility of the proposal to unite the duties of the two professorships and that of director of the Research Laboratory?"

"I can't say that I have not an opinion," was the Professor's parting remark; "but I think I should not be justified in discussing the subject. Clearly, if a man is to fill all the three positions satisfactorily, he will need a good lieutenant in each. We shall see."

Novelties.

EFFERVESCENT LENTIFORMS.

A YEAR or two ago we called attention to the lentiforms of lithium citrate and Vichy salts manufactured by Messrs. Wm. R. Warner & Son, of Philadelphia, which are a convenient form for carrying two of the most useful medicines for gouty people. Their agents, Messrs. F. Newbery & Sons King Edward Street, E.C., now send us samples of the improved lentiforms, experience having shown the manufacturers that certain slight modifications of their formula without essential alteration of the active ingredients, would give a product capable of preservation for a much longer period than formerly. The lentiforms produce lithia and Vichy waters in a few seconds, the draught effervescing gently.

GLUTOL.

MESSRS. A. & M. ZIMMERMANN, Cross Lane, St. Mary-at-Hill, E.C., have reprinted a paper by Dr. C. L. Schleich, of Berlin, regarding the use of formalin-gelatine, or glutol, in the treatment of wounds. The doctor has found that this combination of formalin possesses the full antiseptic properties of that body, and on applying it in powder form to wounds he found that contact of the tissues sufficed to cause a slow, continuous evolution of formalin from the substance, and his results were very encouraging. In treating old wounds, the powder is first dusted on, then moistened with an acid solution of pepsin, which by digesting the gelatine of the glutol ensures the liberation of the formalin. Any chemist who wishes to know more about glutol should get a copy of the reprint from Messrs. Zimmermann, who also supply the drug.

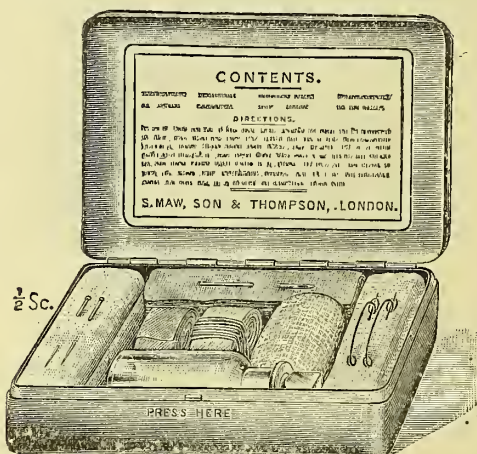
STYPTICIN, OR COTARNINE HYDROCHLORATE.

It is somewhat curious that narcotine, one of the principal alkaloids of opium and one of the most useless as far as its therapeutic value is concerned, should on oxidation yield a body, cotarnine, $C_{12}H_{13}NO_3$ (constituting about half the molecule), which is of much higher physiological activity. This oxidation product has been known for a long time on

account of its chemical interest, but experiments on the physiological side have been made of recent years, with the result, amongst others, that Gottschalk has found it to be wonderfully efficacious in stopping uterine hæmorrhage. Messrs. Burroughs, Wellcome & Co. call our attention to the matter by sending us a sample of tabloids of the alkaloidal salt, for which the name stypticin has been coined. The tabloid-dose is $\frac{3}{4}$ gr. by the mouth or $\frac{1}{4}$ gr. hypodermically. There is room for such a drug.

MAW'S MINIATURE AMBULANCE-CASE.

In a neat little metal case, 4 inches long by $2\frac{3}{4}$ inches wide, Messrs. S. Maw, Son & Thompson have packed the necessary outfit for relieving some of the minor accidents to which we are all subject. The case contains two bandages with a small but sufficient supply of boracic lint and adhesive



plaster for wounds, together with tape for stopping arterial bleeding, silk and a needle, a compress with safety and surgical pins, and a small bottle of ammonia for stings and insect-bites. The boracic lint can be used with oil for the relief of scalds or burns. The case can be sold retail with a fair profit at from 1s. 6d. to 2s.

Spiritualistic Prescriptions.

DR. JAMES BIGELOW, long since dead, was a physician of prominence in Indianapolis, an educated and refined gentleman. One of his patients, a great spiritualist, went to her special medium, and called for the doctor's spirit. It came, and she poured forth her tale of woe about a lumbago she had accumulated. The medium put a bit of pencil between a double slate, and here is what the doctor is supposed to have written:—

RECIPE.					Oz.
Oil turpentin	..	..	..	..	4
Aqua amonia	..	..	..	..	1
Eather	..	..	..	..	$\frac{1}{2}$
Canphor gun	..	..	..	..	..

Disolvi camfor gun in terpentin. Mix the other.
Rub on aftin.

DR. BIGELOW.

It's a wonder the doctor's bones did not turn over in their grave. Maybe they did. But the "resiept" was duly filled by one of the best druggists in the place. The lady used it, one application cured the lumbago, and now "spiritual prescriptions" are much sought after by suffering spiritualists. —*National Druggist.*

Practical Notes and Formulæ.

BABY DUSTING-POWDER.

Boric acid	..	..	..	..	3ijss.
Starch	..	..	..	..	3v.
French chalk	..	..	..	..	1b. iij.
Oil of rose-geranium	..	..	..	..	3ij.

Mix.

KOLA MENSTRUUM.

THE rage for kola has but recently commenced in the United States, and consequently pharmacists are studying it with avidity. Mr. J. H. Schroeder, a Philadelphia College graduate, is one of the latest. He has been trying the efficacy of various menstruum, and finds proof spirit with 1 per cent. of acetic acid (that is, 1 oz. of 33-per-cent. acid to 100 oz. of spirit) extracts the alkaloidal, astringent, and colouring principles best.

FOR TAN AND FRECKLES.

Rose-water	..	..	..	..	3vi.
Glycerine	..	..	..	..	3ss.
Cherry-laurel water	..	..	..	..	5liiss.
Tincture of benzoin, of each..	..	..	..	..	5liiss.
Borax	..	..	..	..	5liiss.

Mix.

Apply night and morning.

—*Amer. Drug.*

PURIFIED ASAFOETIDA.

As it is practically impossible to get asafoetida which is not overloaded with extraneous matter, Professor J. U. Lloyd recommends (*Pharmaceutical Review*) that only purified asafoetida should be used in pharmacy. This he makes by treating the commercial product with alcohol and evaporating off the alcohol, a thin extract being thus obtained which is free from extraneous matter and emulsifies well with water. The entire virtues of asafoetida, he states, are soluble in alcohol, and only a very small loss of volatile oil occurs on evaporation.

WITCH-HAZEL TOILET-CREAM.

Quince-seed	..	..	..	..	3j.
Glycerine	..	..	..	..	3j.
Dist. ext. witch-hazel	..	..	..	..	3xxxij.
Rectified spirit	..	..	..	..	3ij.
Borax	..	..	..	..	gr. xv.

Mix the glycerine, quince-seed, and the extract, and let stand, with frequent agitation, for twelve hours; then strain, and add the borax dissolved in small quantity of water, and add alcohol gradually.

—*Spatula.*

A NEW WAY TO MAKE MERCURIAL OINTMENT.

MR. L. A. HARDING, B.Sc., Ph.D., communicates a note to the *American Druggist*, in which he recommends the following quick way of making ung. hydrarg. :—

Mercury	..	..	..	..	3xij.
Oil of almonds	..	..	..	..	3j.
Sulphuric ether	..	..	..	..	3ij.
Gum benzoin	..	..	..	..	3ij.
Lard	} in official proportions..	..	..	..	3xss.
Suet					

The benzoin is powdered, put into a bottle, and shaken up with the ether; upon this is poured the mercury and the oil of almonds; the mixture is then shaken with a rotary motion, when presently it will gather into a mass, leaving the bottle free from any adhering mercury or fat. Its contents may now be poured out into a mortar, and incorporated with a quantity of the official mixture of lard and suet, afterwards adding the remainder of the fat, and triturating until the mercury is thoroughly extinguished and a perfect mixture results. By this method the ointment may be made in less than two hours—in fact, it has been made by this method in a little more than an hour. The quantity of mercury in the formula conforms to the requirements of the U.S. Pharmacopœia—namely, 50 per cent.

Up-to-date Perfumes.

By G. H. DUBELLE.

Antiseptic Cologne.

	Oz.
Rectified spirit	112
Extr. of orange-flower	9
Oil of orange	1½
Oil of lemon	1½
Oil of neroli petale	1
Tr. of ambergris	1
Tr. of musk	1
Oil of bergamot	½
Oil of rosemary	½
Oil of cinnamon	½
Otto of rose	½
*Corrosive sublimate	½
Chloride of sodium	½

Mix and filter.

In purifying sick-rooms the floor, beddings, &c., should be sprinkled with this cologne.

Pine Forest Cologne.

	Oz.
Rectified spirit	112
Spirit of rose-geranium	7½
Oil of pinus picea	4
Oil of Australian eucalyptus	1
Tr. of ambergris	1
Tr. of civet	1
Oil of Mitcham lavender	½
Oil of bergamot	½
Oil of lemon	½

Mix and filter.

Tasmania Water.

	Oz.
Rectified spirit	112
Spirit of rose-geranium	7
Tr. of ambergris	2½
Oil of Australian eucalyptus	5
Oil of lemon	1
Oil of limes	½
Oil of orange	½
Otto of rose	½

Mix and filter.

Costa Rica Water.

	Oz.
Rectified spirit	112
Extract of jasmin	16
Spirit of vanillin	..
Oil of ylang-ylang	..
Tr. of ambergris	1
Tr. of musk	1
Otto of rose	1
Oil of neroli petale	½

Biflora Cologne.

	Oz.
Rectified spirit	112
Eau de millefleurs	8
Tr. of ambergris	4
Oil of Mitcham lavender	1
Oil of verbena	..
Oil of orange	..
Oil of bergamot	..
Oil of cloves	..
Oil of neroli petale	..
Otto of rose	..

Mix and filter.

Aloysia Cologne.

	Oz.
Rectified spirit	112
Esprit de rose triple	4
Spirit of rose-geranium	4
Oil of lemon	..
Tr. of ambergris	..
Oil of verbena	..
Oil of orange	..
Oil of bergamot	..

Mix and filter.

* This may as well be left out for all the good it will do, and to avoid the poison schedule.—*Ed. C. & D.*

New Books.

- Cohn, Dr. Lassar. *Chemistry in Daily Life: Popular Lectures*. Trans. M. M. P. Muir. 21 Woodcuts. Cr. 8vo. Pp. 331. 6s. (Gravel.)
- Dalziel, H. *The Diseases of Dogs: Causes, Symptoms, and Treatment; Instructions in Cases of Injury and Poisoning*. 3rd edit. enlarged. Cr. 8vo. Pp. 120. Sewed. 1s. (L. U. Gill.)
- Eccles, W. McA. *Elementary Anatomy and Surgery for Nurses: a Series of Lectures delivered to the Nursing Staff of the West London Hospital*. Cr. 8vo. Pp. 174. 2s. 6d. (Scientific Press.)
- Gemmell, G. H. *Chemical Notes and Equations, Inorganic and Organic*. Post 8vo. Cloth. Pp. xii and 244. 5s. (Baillière & Co.)
- Green, J. Reynolds, F.R.S. *A Manual of Botany*. (Based upon the Manual of the late Professor Bentley.) Vol. II. Classification and Physiology. Small 8vo. Pp. xii and 541. Cloth. 10s. (J. & A. Churchill.)
- Maisch, John M. (Prof. of Mat. Med. in the Philadelphia College of Pharmacy). *A Manual of Organic Materia Medica: being a Guide to Materia Medica of the Vegetable and Animal Kingdoms. For the use of Students, Druggists, Pharmacists, and Physicians*. 6th edit., revised by H. C. C. Maisch, Ph.G., Ph.D. (Lea Brothers & Co., Philadelphia.)
- Masson, O. *The Classification of the Chemical Elements*. Crown 8vo. 1s. 6d. (Macmillan.)
- Orford, Hy. *Modern Optical Instruments*. Small 8vo. Cloth. With Diagrams. Pp. vi and 100. 3s. 6d. (Whittaker & Co.)
- Phillips, H. J. *Fuels: Solid, Liquid, and Gaseous: their Analysis and Valuation. For the use of Chemists and Engineers*. 3rd edit. 12mo. Pp. 120. 2s. (Lockwood.)
- Proceedings of the American Pharmaceutical Association at the Forty-third Annual Meeting held at Denver, Colorado, August, 1895; also the Constitution, By-laws, and Roll of Members*. Vol. 43. Demy 8vo. Cloth. Pp. xxx and 1234. *The National Formulary of Unofficial Preparations*. Revised edit. Pp. xiv and 196. \$5. Two in one vol. (American Pharmaceutical Association, Baltimore.)
- Samson, J. *Inventions and their Commercial Development: a Practical Handbook for Inventors; and Investors, showing How to Invent, What to Invent, How to Patent, and How to make Money by Inventions; also Company Promotion as it is and as it might be*. Crown 8vo. Pp. 104. Limp. 1s. (Simpkin.)
- Stanilage, H. C. *Cements, Pastes, Glues, and Gums: a Practical Guide to the Manufacture and Application of the various Agglutinants required in the Building, Metal-working, Wood-working, and Leather-working Trades, and for Workshop, Laboratory, or Office use*. Upwards of 900 Recipes and Formulae. 2nd edit. 12mo. Pp. 172. 2s. *Weale's Scientific and Technical Series* (Lockwood.)
- Vogel, Dr. E. *Practical Pocket-book of Photography: Guide to the Practice of the usual Photographic Processes for Professionals and Amateurs*. Translated by E. C. Conrad from the 2nd German edit. With Illustrations and Index. 2nd edit. 12mo. Pp. 212. Sewed. 1s. (Sonnenschein.)
- Weber, H. and Parkes, F. *The Spas and Mineral Waters of Europe*. Cr. 8vo. Pp. 392. 6s. (Smith & Elder.)

We understand that the work on "Indian Pharmacognosy," which Rai Bahadur Kanny Loll Day, hon. M.P.S., and Mr. William Mair, of Smith, Calcutta, Stannistreet & Co., have jointly been engaged upon, is now in the binder's hands, and it promises to replace in some measure the now obsolete Indian Pharmacopœia.

Business Changes.

Notices of changes in the retail trade, and opening of new businesses, are inserted in this section, free of charge, if properly authenticated.

MESSRS. HENRY HODDER & CO. (LIMITED), chemists, Bristol, have opened a new branch business at Stoke's Croft.

MR. R. C. TURTON, chemist and druggist, has purchased the business of Mr. Calloway at 30 Lucas Street, Kennington Park Road, S.E.

MR. THOMAS LUNN, Worcester, has removed from 38 Upper Tything to new and larger premises a few doors away, which will be known as "Barbourne Pharmacy."

DR. S. H. FRANKLYN has purchased the chemist's business at 730 Old Kent Road, S.E. (formerly Mr. Smith, chemist and dentist), and is trading under the name of Henry James & Co.

MR. EDWARD BEVAN, assistant with the late Mr. John Thompson Williams, pharmaceutical chemist, of 19 Nelson Street, Swansea, has succeeded to the business which the deceased gentleman established and successfully conducted for the last thirty-seven years.

MR. J. E. KERSEY has sold his business at 67 Stratford Road, Plaistow, E., to Mr. J. Savage. Mr. Kersey was apprenticed to the trade in 1842, and in 1854 was appointed on the Army Medical Staff, and was at once sent out to Scutari, from thence to Varna, where he had charge of medical and surgical stores during the Crimean war. He was in the expeditions to Kertch and to Kimburn, in charge of stores.

MR. W. MASKEW, pharmaceutical chemist, of Longsight, has purchased the business of the late Mr. Frank Wild, 285 Oxford Street, Manchester. The premises have been newly fitted, electric light introduced, and a photographic department added. The Longsight establishment has been placed under the management of Mr. M. Richards, from Burrows & Co., Birkenhead.

Marriages.

BOTTERILL—SHERBURNE.—On May 10, at the Parish Church, Wilberfoss, near York, by the Rev. M. H. Smith, M.A., Frederick William Botterill, chemist and druggist, York, to Selina, eldest daughter of Mr. John Sherburne, Newton Lodge, York.

COLLINGWOOD—LEGGE.—On June 17, at 51 Braemar Place, Aberdeen, by the Rev. G. Webster Thomson, B.A., assisted by the Rev. Alan Cant, B.D., Percy Collingwood, of Beaufort Lodge, Honley Road, Catford, Kent (and of Hertz & Collingwood, Leadenhall Street, E.C.), to Jessie, second daughter of the late Mr. John Wilson Legge, of Aberdeen.

FREW—MACDONALD.—On June 5, at the Free Church, Garmouth, near Elgin, by the Rev. Mr. Gardiner, Mr. James M. Frew, chemist and druggist, Dingwall, N.B., to Miss Wilhelmina Macdonald, of Garmouth.

MEREDITH—CAMPBELL.—On June 9, at the Presbyterian Church, Portadown, by the Rev. W. J. Macauley, A.B., William John Meredith, M.P.S.I., Springfield House, Tandragee, to Sara B. Campbell, Bridge Street, Portadown.

PATTISON—JONES.—On June 11, at St. John's, Birkenhead, by the Rev. H. E. Nixon, Joseph Henry Pattison, photographer, Carnarvon (eldest son of Mr. Pattison, chemist, Shrewsbury), to Margaret Jane, daughter of Mr. Henry Jones, Cloughton Road, Birkenhead.

Deaths.

BROWN.—On May 27, Mr. Edwin Brown, chemist and druggist, late of Liverpool. Aged 44.

LA TROBE.—On May 29, Mr. Henry La Trobe, chemist and druggist, Bristol. Aged 54.

LEIPER.—At Holmhead Crescent, Cathcart, Glasgow, on June 13, Mr. Arthur F. Leiper, aged 39 years. Mr. Leiper had been for twenty-six years in the employment of Messrs. Blake & Mackenzie, printers, Liverpool, and represented the firm in Scotland for the past sixteen years as their traveller. He took a keen interest in matters relating to stamp-duty, and was quite an authority on this subject.

THE RELATIONS BETWEEN PHARMACISTS in business on their own account and their more unfortunate brethren, whom lack of means or influence debars from acquiring a concession, although they are fully qualified, does not seem to be very friendly in Germany. At any rate, the fact is specially commented upon in the German pharmaceutical papers as a noteworthy and satisfactory sign that Mr. Apotheker Otto Boenigk has celebrated the tenth anniversary of his dispensership in one pharmacy—that of M. Kessler, of the St. Thomas Apotheke, Berlin.

Trade Reports.

42 CANNON STREET, E.C., June 18.

A FAIRLY steady trade has been done in chemicals since our last report, while in drugs a moderate business is passing. There are not very many alterations to report. Tartaric acid is firm, while citric and carbolic are somewhat slow. Cream of tartar shows no improvement, but in refined camphor there is a rather better feeling. Glycerine keeps quite firm. There has been a sudden and important reduction in the price of salol. Quinine neglected. Scammony resin higher, in sympathy with the root. Heavy chemicals mostly unchanged. Prussiate of potash is quoted somewhat [dearer to-day. Quick-silver firm. The principal features of the drug-market are a very firm feeling in tolu and copaiba balsams. Crude camphor is fluctuating, but closes firm. Castor oil is dearer. Gum tragacanth dull. Insect-flowers and hellebore-root firmly held. Liquorice is also rather steady, and jalap shows a firmer market. Turkish colocynth is dearer. Menthol is somewhat improving, but cod-liver oil remains extremely slow of sale. The gum-acacia auctions to-day were very dull, but privately a moderate business is passing at fairly steady rates for Soudan kinds, while East Indian gums tend lower. Citronella oil is declining. Star-anise and cassia oils dull of sale. Otto of rose expected to be lower. Oil of neroli and French petit-grain oil are easier. Japanese peppermint oil and West Indian oils of limes and bay higher. Opium and saffron unchanged. New French rose-leaves offer at low prices. Scammony-root is firmer. Spices dull and easier for chillies and white pepper. Jamaica ginger, however, is higher. Considerable business has been done in shellac at higher rates, while turmeric remains very quiet. Cotton-seed oil dull at 13s. 10½d. to 14s. for crude, and 15s. 9d. to 16s. 3d. for refined. Coconut oil is somewhat easier from Ceylon. Lagos palm oil unchanged. Turpentine is dearer at 20s. for American spiits. Petroleum fairly steady at 5½d. for ordinary, and 6½d. to 6¾d. for water-white American. Russian is quoted at 5d. to 5½d. per gallon. The bank rate remains at 2 per cent. and bar silver is firmer at 31½d. per oz.

With reference to the paragraph under this heading in our last issue, Messrs. J. H. & J. Y. Johnson, solicitors for Messrs. Wilson, Salamon & Co. (Limited), inform us that the decision of the Comptroller of the Patent Office practically allows Messrs. Wilson, Salamon & Co. (Limited) to make all the excisions in the body and claims of their specification they asked for, and disallows other proposed corrections or amendments which the applicants desired to make. Messrs. Johnson add that Messrs. Wilson, Salamon & Co. (Limited), still believing and being advised that they are entitled to make these other proposed amendments, have appealed to the law officer.

At the meeting of the Council of the London General Produce Brokers' Association, held on Monday, the secretary was instructed to write to Mr. Richard Barron, president of the Drug Club, informing him that the committee would be glad to meet the deputation suggested in Mr. Barron's letter to the Association (*C. & D.*, June 13, page 843) to confer on the question of altering the arbitration clause in the London produce-contracts. Accordingly a meeting has been arranged for midday on Monday, and it is hoped that the question may then be brought a step nearer to satisfactory settlement. A conciliatory spirit appears to pervade the inner councils of the Brokers' Association, but the gentlemen who do the conferring have, of

course, to reckon with the feelings of the members of their Association and of those who entrust the brokers with goods for sale. The Chemical Section of the London Chamber of Commerce does not appear to be regarded by the brokers with the same respect as the Drug Club; at any rate, we have not heard that any of the members of the first-named body have been asked to be present at the Conference. We understand, however, that Mr. David Howard, who is out of town, will practically be represented by Mr. Barron.

Our Hamburg correspondent wires on Thursday afternoon that there are no changes in the drug-market since his last letter, and that camphor is very firm.

Our New York correspondent wires that *Curaçao aloes* of fair quality are being offered at 3¼c. per lb. All varieties of *Copaiba balsam* are extremely scarce, and for good *Pará* 40c. per lb. must be paid. The *Californian honey* crop is now known to be a failure; good quality honey is held for 6c. per lb. New season's *Newfoundland cod-liver oil* offers at from 80c. to \$1 per gallon, which is rather an improvement in price. So far the fishing has been very bad, the result being extremely disappointing to those engaged in the industry. *Senega* and *Snake-root*, as well as medicinal roots generally, are very scarce and advancing in price. *Beeswax*, however, is again easier for *American bleached*. *Coca-leaves* very plentiful; good quality may now be had at 18c. per lb.

The Austrian Consul at Zanzibar mentions that the clove-planters at Zanzibar and Pemba are in an extremely difficult position, because, on the one hand, the price of the article has fallen lower than at any previous time; while, on the other, the cultivation is being more and more restricted on account of the increasing difficulty of obtaining the slave labour, by which the plantations are worked. It is thought that after the abolition of slavery the plantations will pass from the hands of their present Arab proprietors into those of Europeans, and that the price of cloves will then gradually advance.

"The present position of tolu balsam," says the *Oil, Paint, and Drug Reporter*, "is a very interesting one. Not for several years have the conditions been so favourable for a higher range of values than they are to-day. The stock is comparatively light in New York, Hamburg, and in London, and the comparatively high price which has ruled for several months has not had the effect of increasing shipments which dealers anticipated. For nearly a year the market has ruled at over 40c. per lb., yet the direct imports from South America for 1895 were only 85 cases. The visible supply throughout the world has been on the decrease since 1893. Last year Hamburg received no direct shipments from South America, and in 1894 only 56 cases, against 182 in 1893 and 194 in 1892. In New York the imports fell from 522 cases in 1892 to 257 cases in 1893, 172 in 1894, and 85 in 1895. In 1893 the price was from 23c. to 27c. In 1880 it reached 65c., the highest point known in recent years."

ACID (ACETIC).—The quotations for all kinds remain unaltered as last quoted. The prices are well maintained, the consuming season being now at its height, and there is an exceptionally good demand for the higher-strength varieties of acid.

ACIDS.—*Citric* dull of sale at 1s. 1¾d. ex warehouse from second-hand holders, or 1s. 2d. per lb. from the makers. *Tartaric* steady: Lawes' 1s. 3d., foreign 1s. 2d. per lb., c.i.f. *Carbolic* sluggish: crystals, 39-40° C., 6¾d. to 7d.; 34-35° C., 6½d.; crude, 60 per cent., 1s. 1½d.; 75 per cent., 2s. 4½d. per gallon. *Oxalic*: the convention price for large quantities is 3½d. per lb. Fair wholesale lots in casks 3¾d. per lb.

ALCOHOL.—*German potato-spirit* is tending somewhat higher. *Methylated spirit* is quoted at 1s. 8d. to 1s. 8½d. per gallon naked.

ARSENIC remains scarce and firm. For best white English powder 23l. 10s., bonded terms, must be paid.

ASPHALTUM is lower for *Egyptian*, 50s. per cwt. being now the quotation for good quality. *Syrian* dull of sale at from 15s. to 30s. per cwt.

BALSAMS.—*Peru* balsam continues very scarce on the spot at 8s. 6d. to 8s. 9d. per lb., with little offering. *Tohu* is still tending upward; the bottom price for genuine quality is now 2s. 6d. per lb. *Copaiba* balsam is very scarce on the spot, and for fine *Maranham* as much as 2s. 2d. per lb. is asked in some quarters.

BELLADONNA.—The new *Continental* crop is very late, this year's leaves not yet being quoted. Good green old leaves may be had, however, at 44s. per cwt.

BORAX.—Very quiet. The combination-price still stands at 20s. per cwt. for *crystals* and 21s. for *powder*. From outside makers it is possible to buy quite 1s. 6d. below these figures.

CALUMBA.—Scarce, and firmly held; for sorts as much as 18s. per cwt. is now asked. Ordinary yellow picked is quoted at 40s.; and for superior bright picked it is said that as much as 70s. per cwt. has been paid.

CAMPHOR (CRUDE).—At the fag-end of last week the camphor-market was disposed to show more firmness, chiefly on account of higher quotations from the East, 87s. 6d. to 90s. per cwt., c.i.f., being asked for *Formosa*, and 110s., c.i.f., for *Japanese* camphor. It has since transpired, however, that a parcel of *Japanese* gum was sold about the same time, at 105s., c.i.f., May-June. A sale of 200 piculs *Formosa* camphor, near at hand, at 87s. 6d., c.i.f., is also reported. To-day, however, the market is again perceptibly firmer, with a strong undercurrent, owing to rumours that the "Syndicate" are again about to buy. Cables from the East also mention higher rates: 90s. to 92s. 6d., c.i.f., for *Formosa*; and 120s., c.i.f., for *Japan*, distant shipment. *Japan* camphor, near at hand, may, however, still be had for 105s., c.i.f.

CAMPHOR (REFINED).—No actual change in price has yet been announced, but there seems to be a general idea that we are on the eve of an advance. The refiners all say that they are very busy, and have difficulty to execute the orders in hand in good time. The quotation of 1s. 2d. to 1s. 2½d. per lb., c.i.f. terms, made by a second-hand dealer last week, has been revoked by him. He now asks, "without engagement," 1s. 3½d. per lb. for prompt, 1s. 2½d. per lb. for July, and 1s. 2¼d. per lb. for August delivery for 5-lb. blocks. All these prices are "c.i.f." terms.

CANARY-SEED.—Very dull of sale at low prices, *Turkish* at 23s. to 23s. 6d., *La Plata* 24s. 6d. to 25s. per quarter.

CANTHARIDES remain exceedingly quiet, sifted *Russian* at 2s. 3d. to 2s. 5d., good *Hungarian* at 2s. 7d. to 2s. 8d. per lb.

CASCARILLA.—A parcel of about 15 bales rather thin brown mixed bark has been sold privately at 45s. per cwt., which shows a fairly steady market.

CINCHONA.—Without special features; flat cultivated *Culisyaya* is selling slowly at the recent rates.

COCAINE.—There is no change in the prices at present, but we hear that efforts are being made to form a new combination among the manufacturers. Some of these gentlemen, however, at present refuse to come in, and the prospects of the renewal of the combination do not appear to be very bright.

COLCHICUM SEED is quoted at higher prices, 41s. to 42s. per cwt. being the current quotation. Sliced root is still quoted at 31s. to 32s. per cwt.

COLOCYNTH.—*Turkish* apple is again higher. Sales of best pale quality have been made privately on the spot at 2s. 8d. per lb. A few packages are still offering at that rate; but the importers threaten to advance the price to 2s. 9d. after the next transaction. They feel very confident that there will be a further increase, as they say that no new crop can be looked for until November.

CREAM OF TARTAR.—Dull of sale, with a rather easier tendency. The quotation for good white crystals from Bordeaux is 89s. per cwt., f.o.b. Spot 95s. for crystals, 97s. for powder.

GALLS.—*Japanese* quietly steady with small sales at 52s. 6d. c.i.f. terms for near at hand. *Turkish* galls are firmly held, but without much business. *Bassorah* Blue 52s. 6d. to 54s. green 42s. 6d. to 47s. 6d. Blue *Smyna* offer at 46s. per cwt. *Chinese* very quiet at 57s. to 57s. 6d. per cwt. on the spot.

GENTIAN-ROOT is tending somewhat easier, and it is believed that the arrival of the new *French* crop, which will be due next month, will mark a decline in price. Some of the agents talk of about 15s., f.o.b., or about 17s. 6d., London terms, as a likely opening quotation.

GLYCERINE keeps extremely firm at 63s. to 72s. per cwt. for double-distilled, s.g. 1.260.

GUM ACACIA.—Picked *Trieste* gums are held for high prices, but business is rather restricted. *Soudan* sorts very dull with an easier tendency in most quarters, although some holders remain quite firm. *Persian* gum (so-called "insoluble") is easier for fine quality; pale selected is quoted at 22s. to 24s. per cwt., sorts at from 15s. to 17s. per cwt. East Indian gums have been arriving in very large quantities lately, and can only be sold at sacrifices which holders appear indisposed to make. This applies especially to the new crop of *Ghatti*, which is now coming in. Of *Brown Barbary* gum, however, our stock is small, and there are not likely to be any arrivals until the new crop comes to hand in the autumn. The current quotation for this grade is now about 60s. per cwt. A few weeks ago it was 65s. per cwt. At to-day's auctions a supply, consisting of about 4,500 packages, was offered; but practically the whole of this was bought in, only 158 packages being sold, mostly without reserve, and almost all of inferior quality. There was, in fact, no animation in the market whatever, and one catalogue after another was gone through without a single bid being made. All the same the position is not quite so bad as the auctions would seem to indicate; for privately a fair amount of business has been done since the sales, and holders generally are not disposed to make any further important concessions. We understand that 50 bales of fair partly hard dark sorts were sold to Liverpool to-day at 84s. per cwt., while small lots of similar character, but not quite so good, have charged hands here at 82s. 6d. per cwt. The offerings at the sales were composed as follows:—*East Indian*, 3,125 packages (101 sold); *Aden*, 620 (46 sold); *Australian*, 152 (2 sold); *Persian*, 332 (none sold); *Soudan*, 375 (8 sold); *Barbary and Niger*, 35 (none sold). The following was the range of prices: Medium *Ghatti* realised 42s. 6d. *Aden*, small and somewhat dark mixed drop, 27s. to 31s.; fine bold siftings, 35s. to 36s.; dusty to fair ditto, 25s. to 28s.; ordinary, 10s. 6d. to 14s. per cwt. For blocky red *Australian*, 28s. to 30s. per cwt. was paid.

GUM EUPHORBIIUM.—Reported to be very scarce. Recently fair quality could be had at 25s. per cwt., but at present 26s. to 28s. is asked by the holders.

GUM TRAGACANTH.—Very dull of sale. No business is reported in fine grades, which are quoted as follows:—Best white *Persian*, 14l.; seconds, 12l. to 13l.; thirds, 11l. to 11l. 10s. per cent. A considerable quantity was put up for sale to-day, but almost all bought in. The demand was extremely slow.

GUM OLIBANUM.—Very flat. At auction only a few parcels sold, at 35s. per cwt. for good drop, and 17s. 6d. for common ungarbled ditto, and 11s. to 12s. 6d. per cwt. for siftings.

HELLEBORE-ROOT.—Firmly held. White root is quoted at 21s. 6d. to 22s., black at 22s. 6d. to 23s. 9d., green 46s. to 47s. per cwt.

INSECT-FLOWERS.—Very firmly held. Nearly all the consumers have now laid in their requirements for the season, and there is consequently not much business doing here, but powder is in demand at steady rates; from 10d. to 1s. per lb., c.i.f. terms, for guaranteed pure, and from 8d. downwards for so-called "coloured."

JALAP is very firm, and no good *Vera Cruz* is now obtainable below 7d. per lb. in London. A parcel of about

25 bales, described as prime *Vera Cruz*, is offering from New York at 6d. per lb., c.i.f. terms.

LIQUORICE—It is now reported by some of the agents that the whole of the last crop of Russian liquorice-root has been sold, and that no more will be available until late in the summer, when the new root is dried. Sales of common rough *Persian* root have lately been made at 7s. 6d. per cwt. Powdered liquorice is firm at from 19s. up to 35s. per cwt., according to quality.

MANNA—There is a tendency towards some improvement in the position of this article. The trees are said to have blossomed well, but to have very few leaves, and holders in Italy are therefore said to be minded to keep back their supplies until prospects of the new crop are more definite. The new *Silician* crop will be gathered in about a month's time.

MASTICH in large supply. Good pale drop, such as was sold "without reserve" at the last auctions, might probably still be had at 1s. 5d. to 1s. 6d. per lb.

MENTHOL continues to improve, the quotation being from 3d. to 6d. higher since last Thursday; 10s. 3d. has been paid for fair brands on the spot, and is reported to have been refused. It is said that the exports from Japan are likely to show a considerable falling off, and that a large proportion of the menthol available in Europe has been bought by speculators, especially in Hamburg. Some holders quote 11s. per lb. to-day for good brands, and 13s. 6d. per lb. for Cocking's. The "c.i.f." quotation is 8s. 6d. per lb.

OIL (COD-LIVER)—Advices from Newfoundland state that the present high quotations of cod-liver oil are inducing many new firms in the island to take up the manufacture. The refining processes are also gradually being improved, and before many seasons are over the Newfoundlanders may be ahead of the Norwegians in our markets. It is urged that the Newfoundland Government should appoint an inspector to supervise the new factories, and see that a high standard of quality is maintained.

OILS (ESSENTIAL)—*Oil of lemongrass* remains very slow of sale, 2½d. per oz. is the nearest spot-quotation. *Citronella oil* is declining, and it is now difficult to find buyers. On the spot the nominal quotation is 1s. 5d. per lb., while for shipment there are anxious sellers at 1s. 3½d. per lb. *Oil of star anise* dull of sale, with a lower tendency; 8s. per lb. would certainly buy, and for shipment figures are more or less nominal. *Cassia oil* neglected, at 7s. 9d. to 8s. per lb. for 80 per cent. No reliable reports have yet been received with regard to the output of *Otto of rose* in Bulgaria. The distillation is still proceeding, and it is generally expected that the opening prices of the season will show a more or less considerable decline upon that of last year, which was 35s. 6d., f.o.b., per Turkish oz. for the standard brand. *Oil of neroli* is considerably lower. Prices for the new crop have now been fixed, and range from 5s. 6d. to 9s. per cz. for common to fine quality, which is about 1s. 6d. below the opening quotation of 1895. *Japanese Camphor oil* is very scarce; white, 48s. 6d. per cwt. W.I. oil of *Limes* very scarce on the spot, up to 4s. 6d. per lb. being asked. *Bay oil* is also scarce and dear; 11s. per lb. is required. *American Peppermint oil* quiet, at 8s. 9d. to 9s. per lb. for H.G.H. A bid of 8s. 6d. per lb. for a large quantity was solicited to-day. *Wayne County oil*, according to quality, 6s. 6d. to 7s. per lb., on the spot. *Japanese Peppermint oil* firmer; dementholised, 4s. 6d.; 40-per-cent, 6s. 9d. per lb., on the spot.

OPIUM remains quite dull, and the only business of any importance transacted is in *Persian* kinds, at from 11s. per lb. for common up to 13s. per lb. for fine bricks.

PILOCARPINE is steadily declining in consequence of the more liberal supply of *jaborandi*-leaves now available. One of the makers quotes it at 4s. 9d. per gramme, but there would be no difficulty in buying on the spot at 4s. 6d. or even less.

QUICKSILVER—Steady, at 6l. 10s. per bottle from the importers, and 6l. 9s. in second hand.

QUININE—Extremely dull of sale, 12½d. per cz. being the nearest quotation for second-hand *German* bulk.

RHUBARB remains very quiet at unchanged prices, although the reports from China still mention that very little is offering there, and that higher rates are asked all round. *Rhapontica* is being offered at from 46s. to 56s. per cwt., f.o.b., according to quality.

ROSE-LEAVES—New *French* leaves offer to arrive (the new crop not yet being available here) at 1s. 1d. to 1s. 2d. per lb. The Dutch and German new leaves are not yet available.

SAFFRON remains very firm, but without further changes, at from 27s. 6d. to 32s. 6d. for *Valencia*, according to quality.

SALOL—The quotation for Salol has been suddenly and quite unexpectedly reduced by the combined manufacturers from 7s. 4d. to 4s. 6d. per lb. This is a decline of about 35 per cent., as the present quotation is net, whereas the previous one, which has held good for about a year, was subject to a progressive discount amounting to 6 per cent. on 1 cwt. parcels. It is understood that the present sweeping decline was decided upon in order to ward off threatened French competition, but it should be remembered that for some time outside-manufacturers have "cut" the convention price. Moreover, we hear that in France the price is still below the reduced convention-figure.

SARSAPARILLA remains extremely firm for all varieties; further sales of good red native *Jamaica* have been made privately at 1s. 5d. per lb.

SCAMMONY Root, which remains very scarce, has been sold at 60s. per cwt. lately, and more money is again asked. First quality *Turkish resin* has changed hands at 30s. per lb. lately, but 31s. per lb. is now required. *English resin* is higher, from 9s. 3d. to 9s. 6d. per lb. being asked by the makers.

SHELLAC—There has been a decided improvement in the shellac-market this week. Following upon the strong American demand which has lately been manifested comes the report that one of the principal importers of the article is "oversold," or has difficulty in obtaining delivery from his native intermediaries in India, and has, therefore, been compelled to cover his bear sales. On the spot fair *Second orange* TN has been sold at 92s. to 93s. per cwt. cash terms, and for arrival and future delivery a large business has been done. *Garnet AC* is somewhat slow of sale, at 83s. 6d. per cwt. At the auctions on Tuesday the comparatively small supply of 455 cases was offered, of which 265 sold at an advance of 3s. per cwt. on good second orange, while fine qualities were all bought in. *Garnet lac* realised an advance of 2s. to 3s. per cwt. on the last auctions. The following prices were paid:—*Second orange*, fair reddish to pale, 93s.; bright curly and cakey, 91s. to 92s.; hard red to pale block, 86s. to 90s. per cwt. *Garnet*, PBG, 84s. per cwt. *Button*, blocky to good firsts, 88s. to 91s.; seconds, 84s. per cwt. Since the auctions the demand has continued good, especially for *Button lac*, of which 200 cases have been sold at full prices. There are buyers of TN *Second orange* to-day at 90s., c.i.f. for May-June shipment.

SODA SALTS—Refined *Nitrate* is quoted at from 8s. 2½d. to 8s. 3d. per cwt.; ordinary at 7s. 10½d. per cwt. *Caustic soda* may be had on the spot at 7l. 15s. for 70 per cent., or at 7l. 10s., f.o.b. Liverpool. The quotation for 76 per cent. is 9l., f.o.b. Liverpool or Tyne; and for 60 per cent., 6l. 10s., f.o.b. Liverpool. *Crystals* are quoted at 42s. 6d. per ton on the spot, 47s. 6d. per ton f.o.b. Liverpool, or 42s. 6d. f.o.b. Tyne. *Bichromate of soda* is quoted at 3½d. per lb.; *Hyposulphite* in good demand, at 6l. 5s. to 6l. 15s. on the spot, according to packing, while the f.o.b. quotation on the Tyne is 5l. 5s., or at Antwerp is 5l. 10s. There is a strong competition for supremacy in the market between the British and Continental makers of *hyposulphite of soda*, an article which is increasing in commercial importance every year. At present the British makers seem to have the best of it, and they are offering at prices which their Continental competitors find it difficult to follow. *Bicarbonate* offers at 7l. 5s. per ton in kegs from the warehouse, and 6l. 5s. to 6l. 15s., according to packing, f.o.b. Liverpool.

SPICES—With the exception of *Jamaica ginger*, which continues in demand at rising prices, all kinds of spices are neglected. At auction on Wednesday *White Penang pepper* sold at 2½d. per lb., good to fine Singapore at 4d. to 4½d. per

lb. (showing a slight decline), while all the *Black pepper* offered was bought in. Of *Pimento*, 1,500 bags sold at a decline of about $\frac{1}{4}$ d per lb.; very low to good, 2d to $2\frac{3}{4}$ d. per lb. *Arrowroot* is slightly easier, common to fine *OWIA* St. Vincent, sold at $1\frac{1}{2}$ d to $2\frac{1}{2}$ d. per lb. *Chillies* also lower. At auction 51s. 6d. per cwt. was accepted for very fine bright-red Japan, while good long Japan *Capsicums* realised 13s. per cwt. *Mace* and *Nutmegs* remain very flat. No *Zanzibar cloves* were offered at auction; privately the market is dull, $2\frac{1}{2}$ d. per lb. is the nominal quotation for June-August delivery. For common, partly headless *Ambayna cloves*, 3d. per lb. was accepted. *Jamaica ginger* remains enquired for, over 100 packages sold at auction at from 72s. 6d. to 83s. per cwt. for ordinary medium to good bright washed, showing a higher range of prices. *Japanese ginger* realised 17s. to 19s. per cwt. for ordinary to fair limes, and 21s. to 21s. 6d. per cwt. for good bright. *Cochin ginger* flat and somewhat easier, over 2,500 packages were offered at auction, but only some 350 found buyers: rough to good bold A cut at 63s. to 73s. 6d. per cwt.; small to medium native, part cut, 45s. per cwt.; fair small to medium washed rough, 33s. to 35s. per cwt.

SULPHUR has advanced considerably, partly on account of demand, but particularly because it is said that a convention between the *Italian* and *English* producers is about to be signed. Foreign flowers, which until recently might have been had at 5l. 5s., are now quoted at 5l. 15s. per ton on the spot in bags; *Roll* at 5l. 10s. per ton.

TONCA BEANS.—An American exchange states that the recent arrival of about 70,000 lbs. new *Angostura* beans has revived the interest in the market. This arrival has come to hand about four weeks before the usual time, owing, it is said, to improved means of shipment from the source of supply. It is thought that these arrivals indicate a large crop, and that the average annual consumption, which is estimated at 150,000 lbs., will probably be largely exceeded. There are also, it is said, from 15,000 to 20,000 lbs. of *Angostura* beans left in second-hand in America. The position of the article has also undergone a change, inasmuch as the new crop has been secured by one house, who will fix the same price for all wholesale parcels, whether for consumption or resale; but it is rumoured that another firm has secured about 50,000 lbs. of the new crop.

TURMERIC.—*Bengal root* is very quiet; the nearest quotation is 7s. 6d. per cwt. for fair.

VALERIAN higher, and tending to be still dearer before the new crop comes in. The quotation now runs from 2½s. per cwt. for bright up to 2½s. per cwt. for dark root.

Heavy Chemicals.

There are no special changes to record in the position of heavy chemicals this week. The volume of business passing shows no great improvement, both export and home trade orders are however fairly well maintained and prices remain steady. *Bleaching Powder* is in quiet demand at unchanged rates, a fuller enquiry however being shortly expected from the States, owing to the late reduction in price for that market. *Caustic Soda* is quiet. *Soda Crystals* unchanged. *Recovered Sulphur* in good demand at 3l. 17s. 6d. per ton nett in 2 cwt. bags. It is however possible that a further advance may take place shortly, if, as is expected, an arrangement is come to between the Sicilian producers and those in this country. *Alum* and *Sulphate of Alumina* are in steady request at unchanged rates both for export and home trade. *Sulphate of Ammonia* quiet, Beckton terms 7l. 17s. 6d. Leith 7l. 17s. 6d. London 8l. 2s. 6d. Hull 7l. 18s. 9d. to 8l. *Sulphate of Copper* lower, Anchor July 19l. Liverpool June 18l. to 18l. 10s. and July 17l. to 17l. 10s. *Benzols* quiet but firm and are now quoted, 80 per cent. prompt 2s. 9d.; July-December 2s. 8d. 50 to 90 per cent. prompt 2s. 4d., forward 2s. 3d. *Chlorates of Soda* and *Potash* quiet. *Yellow Prussiate of Potash* dull with lowering tendency. *Green Copperas* in brisk request, but price unchanged. *Saltcake* selling freely. White powdered *arsenic* continues very scarce, price being about 23l. 10s. *South Durham Salt* selling freely at late quotations. *Barium* compounds firm, the *Carbonate* and *Nitrate* being in especially good demand. For *Linseed Cakes*, *Cottonseed Cakes* and *Oilcakes* prices remain steady, the demand however is not particularly brisk.

The Liverpool Drug market.

Our Liverpool correspondent, writing on June 17, says the chief feature on the market for the week has been the move in *Castor oil*. The cheap parcels have been cleared off, and now good seconds Calcutta are being held for $2\frac{3}{4}$ d., with every prospect of yet higher figures in the near future. Madras has followed the lead of Calcutta, and good seconds of the former are held for $2\frac{3}{4}$ d. First-pressure French is not so abundant, and holders are asking $2\frac{1}{4}$ d. Sudan sorts of *Gum acacia* are held firmly, but buyers do not afford much support to the market, orders for consumption coming in slowly, and the transactions are again very limited, the present range of value being 70s. to 90s. Medium qualities share in the inactivity, and there is an absence of business to report. *Beeswax* has been arriving more freely, and the market for *Chiliat* has eased off slightly, but at the same time *Gambia* (West African) has sold at 7l. 8s. 9d. to 7l. 12s. 6d. per cwt., which is a substantial rise for this grade. *Canary-seed* is unchanged in value and position. *African Ginger* is steady at the rates recently advised, but holders show less disposition to meet sellers' views, and better prices are looked for shortly. *Cream of tartar* is better, and first white is held for 100s per cwt. *Honeys* of all grades are showing a firmer tendency, in view of the bad reports from abroad as to the coming crop.

The Hamburg Drug-market.

Our Hamburg correspondent writes on June 16: "Business is still very dull here, and there is very little doing in any department of the drug-trade at present. *Antimony* is firm at 35m. to 36m. per 100 kilos., for crude Japanese. *Balsam Peru* is scarce and firm at 1625m. to 1630m. per kilo. *Balsam (copaiba)* is steady, fine pure quality is quoted 320m. to 340m. per kilo. *Camphor (refined)* is a little firmer, spot demands 275m. per 100 kilos., July delivery 260, August 245m. per 100 kilos. *Galangal* unchanged and firm at 55m. to 56m. per 100 kilos. *Gum acacia* quiet at unchanged prices. *Jalap* very firm, holders ask to day 110m. to 115m. per 100 kilos. *Glycerine* very firm and scarce and it seems probable that prices will rise ere long. *Honey* remains quiet with little disposition to buy. *Kola nuts* are quiet at 80m. to 140m. per 100 kilos. according to quality. *Menthol* is a shade firmer and held at 20m. to 21m. per kilo. *Cassia lignea* is improving, holders of good old quality ask 65m. per 100 kilos, but there is as yet no demand at this figure. *Ergot of rye* continues dull, prime Russian quoted 69m. to 69 50m. per 100 kilos. *Cod-liver oil* is still quiet with a very slow demand; 1895 and 1896 non-congealing oil is offering at 165m. per barrel. *Sweet Seal oil* unchanged. *Cajuput oil* (green) is quoted 4m. to 4 10m. per bottle. *Peppermint oil* is unchanged: H.G.H. at 9 25m. to 9 50m. per lb.; Todd at 8 50m. per lb. *Star-anise oil* unchanged, at 18 50m. to 19m. per kilo. *Clove oil* quoted 3 90m. to 4m. per kilo.

The Amsterdam Cinchona Market.

Our Amsterdam correspondent, writing on Friday last, observes that the Java cinchona-auctions on June 11 were chiefly remarkable for the fact that for rich manufacturing barks (which were in good supply) prices were paid altogether exceeding the regular unit figure. The auctions included 1,150 kilos. of bark analysing from 8 to 9 per cent. of sulphate of quinine, and 1,010 kilos. analysing from 10 to 11 per cent. The richest parcel at auction was one of 10 bales crushed ledger-bark from the *Gamboeng* plantation, which fetched 37½c. per $\frac{1}{2}$ kilo, equal to a unit of 340c, whereas the average unit for fair-quality barks was only 290c. Our correspondent adds that there must have been some special reason why these barks realised such high rates. Pharmaceutical barks of fine quality also fetched high prices; medium and ordinary grades were neglected, and mostly bought in. The bark stock in Amsterdam is now very light.

THE SIGN MAY STAND.—The Wandsworth District Board of Works have now agreed to allow the signboard projecting in front of Parke's Drug-stores, High Street, Putney, to remain, on condition that the stores have it examined as to its safety and stability every three months.



Memoranda for Correspondents.

In letters for publication correspondents are requested to express their views as concisely as possible.

Correspondents should write on one side of the paper only, and devote a separate piece of paper to each subject of inquiry.

The name and address of the writer should accompany all communications, with, if desired, a distinctive nom-de-plume.

Chelsea Pensioner.

We have received the subjoined in reply to our request for old formulas with notes as to their origin:—

Mr. James Selkirk, pharmaceutical chemist (G.B.), of Cork, says this recipe is from a M.S. book, at least forty years old, belonging to an L.A.H. Dub.:

Pulv. rhei	3ij.
Pulv. guaiaci	3ss.
Pulv. potass. nit. .. .	3j.
Sub. sulphur	3j.
Pulv. sinapis	3j.
Mel	q.s.

M.B.

Mr. J. W. Taplin, Harlesden, N.W., in an old recipe-book, dated 1833, finds the following:—

The iac.	3xvj.
Guaiaac.	3j.
Sulphur	3j.
Pulv. rhei	3ss.
Crem. tart.	3j.
Pulv. zingib.	3iss.

Mr. F. Freeman, 66 High Road, Balham, S.W., quotes from Rennie's "New Supplement to the Pharmacopœia" (1837):—"Make electuary of 3j. of guaiac, 5j. of rhubarb in powder, 3j. of nitrate of potass., and 3j. of flowers of sulphur, with one nutmeg in powder. Dose: two tablespoonfuls, night and morning, as a purgative and diaphoretic."

Mr. H. Machon, Saffron Walden, sends what he says is the "original recipe," viz.:

Pulv. guaiaci ver. .. .	3j.
Pulv. rhei opt	3ij.
Bitartrate of potash ..	3j.
Sulphur	3ij.
Nutmeg	No. 1.
Honey lb. j. v l .. .	q.s.

To form an electuary.

We are still far from the original formula. Last week we gave an older one than any of the above—viz, Brande's, published in 1825. This is substantially the same as Mr. Machon's, without guaiacum. Brande may have omitted it in error. No two of the above formulæ are alike, and they seem to show that nitre took the place of cream of tartar between 1833 and 1837, both Brande in 1825 and the recipe-book of 1833 giving pulv. potas. bitart. Can "p. pot. bit." have been misconstrued by someone into "p. pot. nit."? Any authentic information regarding the origin of the remedy would be useful. We have, since the foregoing was written, received the subjoined.—ED. C. & D.

SIR—There do not appear to be two formulæ alike amongst those to be found in books, and which, if any, is the original and genuine it is difficult to decide.

The older ones seem to be confined to guaiacum, rhubarb, sulphur, cream of tartar, nutmeg, and honey; but the proportions are different. Brande (1825) gives:—

Rhubarb	3j.
Cream of tartar .. .	3j.
Sulphur	3ij.
Nutmeg	1

Paris's "Pharmacologia" (1829):—

Guaiaacum	3j.
Rhubarb	3ij.
Cream of tartar .. .	3j.
Nutmeg	1
Sulphur	3ij.

A recipe I have taken from an old book, in use sixty or seventy years ago, gives:—

Guaiaacum	3j.
Rhubarb	3ij.
Cr. tartar	3j.
Sulphur	3j.
Nutmeg	3j.

Beasley (1872) gives exactly the same as this; all direct lbj. of honey to be used, which means 3xij. troy weight. If anyone could find out the original dispenser of the medicine for Lord Amherst, probably the recipe might be found in the books of the firm, if it still exists. Probably some of the old London houses might have dispensed it.

Cheetham Hill, June 15.

W. WILKINSON.

SIR,—The following is copied from a recipe-book that belonged to my father. It is dated 1827, and would be entered therein about the fifth year of his apprenticeship:—

Mel. depurat.	lbj.
Potasse supertart. .. .	3j.
Sulph. sub.	3ij.
Pulv. rhei	3ij.
Pulv. guaiac.	3j.
Pulv. zingib.	3ss.
Pulv. myristae	3ij.

M. Ft. elect.

A teaspoonful to be taken two or three times a week in warm water or grog.

JOHN BROWN.

The above is copied verbatim.

Heaton Norris, Stockport,

R. O. HUDDLESTONE.

June 15.

P S—Since writing out the above have come across the same recipe in Gray's "Supplement," published in 1843.

Chelsea Pensioner, for gout and rheumatism, purchased from a pensioner by Lord Anson for 500 guineas and an annuity of £04.:

Gum guaiaci	3ij.
Pulv. rhei	3ss.
Sulph. sub.	3ss.
Pot. bitart.	3ij.
P. nucis moschat. .. .	3ss.
Theriac.	q.s.

Ut ft. elect.

Dose: One to two teaspoonfuls night and morning. A glass of hot rum and water after being in bed; if much fever, white wine and water hot.

I got the above from a receipt-book of Dr. Lees, who had a shop in Nicolson Street, Edinburgh, in the 70's, and must be very old.

Yours faithfully,

W. M. M. (101/72)

[The last communication mentions that it was Lord Anson who got the recipe; Cooley says Lord Amherst, and we think Cooley must be right, because Viscount Anson, living at the time the recipe appears to have originated, was not a military man. He was created Earl of Lichfield in 1831. On the other hand, the first Lord Amherst (who died in 1797) was a Commander-in-Chief of the British army, and was succeeded by his nephew, who had been an Ambassador to China and Governor-General of India. He was raised from the dignity of Baron to that of Earl Amherst in 1826. It seems that either of these gentlemen would be more likely to come into contact with old soldiers at Chelsea Hospital than Lord Anson, a civilian, who, as Anson, was practically unknown after 1831.—ED. C. & D.]

The Chicago Awards.

SIR,—I think you will agree it is not characteristic of America to be slow in matters of any kind, but up to now

we have not received the medal or award we were allotted at the Chicago Exhibition, and the enclosed has just been received from our representative who was at Chicago.

Yours faithfully,

June 12.

THE LIQUOR CARNIS CO.

[The "enclosed" is a sarcastic account of the dilatoriness of the authorities at Washington in regard to the awards. It was promised on May 8 last that the medals and diplomas should be handed to the British Ambassador at Washington "about" May 15. Their receipt has not yet been advised.]

Re Dog-poisoning.

SIR,—I have just noticed in *C. & D.* directions for the safety of all concerned in dog-poisoning. For cats, I can speak from experience—anyhow, for the most humane method, if not the safest—that is, to get a linen bag over the head, pull string to tighten round the neck, pour a little chloroform upon the bag, and pnsy, or the dog, will then allow any amount of chloroform to be repeated q.s. to produce the desired effect, causing no trouble whatever.

Yours, &c.,

116 Jamaica Road, S.E., June 16. C. W. FRIDMORE.

Is the Drug-trade Overcrowded?

SIR,—The drug-trade is not overcrowded with qualified assistants, by which I mean those who, whether holding the Minor certificate or not, possess a fairly accurate knowledge of the processes, strength of preparations, and the chemistry of the B.P., as well as of accounts and business methods, which you rightly place above all. It is, however, in a general sense no doubt, overcrowded owing to the scarcity of those who have brains enough to render themselves proficient in their calling. The Minor is no criterion of a man's value as an assistant. I have had eighteen assistants within the last ten years, including four Minor men who were, with perhaps one exception, the most unbusinesslike of the lot. The weak point with most young men, seems to be memory, or, rather, lack of it. I have had men in the place six months who still had to ask me where to find things they had handled scores of times; others did not know in what proportions to mix them when asked for 2d. worth of linseed oil and lime-water; one, a qualified man, too, did not know the difference between ol. citron and ol. citrone-læ; whilst another was at sea when asked what 10 per cent. and 5 per cent. off a given sum was. If the examiners were to put a few questions on practical points such as these, instead of inquiring into men's knowledge of things that not one out of a hundred is ever likely to meet with, the chemists of the future might be a more businesslike race than those of the past.

Yours truly,

June 15. CHARLESDEN (101/21).

MISCELLANEOUS INQUIRIES.

N.B.—All queries should be accompanied by the business card of a subscriber, or the address label from THE CHEMIST AND DRUGGIST wrapper. We destroy anonymous letters. We do not answer queries of the kind here dealt with by post. We ask that separate queries shall be written on separate sheets of paper.

NO SAMPLES will be analysed and reported upon unless the sender labels the sample with his name and the name of the article, and informs us (not necessarily for publication) by whom the article is made, for what purpose and how it is used, and any further particulars of interest.

Back numbers containing formulæ, educational or other specific information can be obtained from the Publisher.

92/8. *X. Y. Z.*—Digestive-syrup.—See *C. & D.*, October 13, 1894, page 565. One like Seigel's is in *C. & D.*, October 15, 1892, page 597.

95/15. *W. E. H.*—We have found a mixture of calomel and mucilage of acacia an excellent thing for cementing composition mortars. Litharge and glycerine is also good.

93/51. *D. M. M.*—It is an ice-cream machine you want, apparently. You can get one from Fordhams.

85/32. *Nomen* says the preparation made according to subjoined formula becomes mouldy in a short time, and sometimes it separates into two parts—liquid and semi-liquid:—

Cucumber and Elder-flower Jelly.

Gelatini	5x.
Aq. flor. sambuci trip.	3iv.
Aqua	3xvj.

Soak two hours, heat until dissolved, and add—

Succi cucumeris	3xiij.
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in which the white of two eggs has been whisked up. Heat to coagulate, and strain through linen while still hot into glycerin. 3iv. in which 30 gr. ac. salicyl. has been dissolved. Colour with chlorophyll (or aniline green), and bottle while warm.

The gelatine is in this case practically digested by the cucumber-juice—it is prone to go that way in presence of certain vegetable juices. Spirit of cucumber would serve to give the name to the article, and would do as much good as the juice. An ounce, or an ounce and a half, of the spirit is all that will go into the jelly. Aq. flor. sambuci trip. is often full of microbes, and they serve to start the mould referred to, but there is not nearly enough glycerine in the preparation. We should be inclined to modify the preparation as follows:—Soak 1 oz. of gelatine in 20 oz. of water until soft; then add 6 oz. of glycerine, and dissolve by heat. While hot add a mixture of elder-flower oil m.v. and aniline green gr. j., dissolved in spirit of cucumber 3iss. and mixed with glycerine 3iss. Then mix the egg-white with 1 oz. of water, add to the mixture and mix well, heating, if necessary, to coagulate. Then strain. Pour into bottles, and when it sets brush the tops with spirit of cucumber containing 20 grs. of salicylic acid in each ounce.

94/13. *Hypophosphitum.*—Syr. hypophos. co. is meant. Fellows's is the original, and there is an imitation of it in the Unofficial Formulary.

93/57. *V. C.*—We object to correspondents using Christian name and surname not their own as a *nom de plume*. In common courtesy that sort of thing should not be done. Litharge and glycerine cement (glycerine made into a thin paste with finely-powdered litharge) is good for cementing brass and iron, and is not acted upon by spirit. There are numerous formulæ for syrups in back numbers. Let us know which ones you want, and if we have the numbers in stock we will supply them at the usual rate.

88/66. *Rad.*—The Society you ask about has not a good reputation. Payment of a subscription is, we believe, the only qualification for membership.

76/50. *W. F. E.*—We have been unable to find any mention of such an ink as you indicate. Chloride-of-cobalt solution gives invisible marks, which become blue on heating, and disappear again on cooling.

88/60. *Stonecrop*—The most reliable Weed-killer for Stonecrop is common vitriol, half a teaspoonful poured upon each root killing it. Sometimes the Acid Arsenical Weed-killer succeeds where the alkaline one fails. It is made as follows:—

White arsenic	lb. j.
Spirit of salt	O j.
Water	O xj.

Boil in an enamelled basin until dissolved, and colour with aniline green. When required for use dilute with about 10 volumes of water.

90/16. *Columba* does not give his name. Should he wish his queries replied to he must repeat them with name and address.

90/50. *Lewis.*—See page 851 in our issue of June 13. For an immediate brown dye a solution of pyrogallie acid is most suitable.

90/54. *G. M.*—The impression is pretty general that there is a Powder which will Kill Beetles, and the beetles are good enough to humour man by occasionally expiring after a feast of red lead, borax, and Epps's cocoa mixed in about equal parts. But if Manchester beetles were to end their lives so, and Liverpool ones heard of it, they would straightway proceed to show the whole beetle world how to live happily on the boro-plumbic cocoa diet; and we expect that if your Edinburgh beetles heard of their Glasgow friends succumbing to the treatment, yours would follow the Liverpool example. In short, we have heard of no beetle-killing powder yet upon which beetles have not been known occasionally to fatten, and get up a concert. Persian insect-powder is the most reliable of powders, because you may get up in the middle of the night and with a broom and a shovel be sure of securing a big haul. They must be exterminated straightway, as insect-powder only intoxicates beetles, and as they get over the debauch they crawl home, human-like, in pairs; that is why a broom and shovel are so necessary before they retire. The insects are apparently attracted by odours. For example, if you take an ordinary "Demon" beetle-trap and put a little toasted oatmeal in the tiny bowl on the top, you will find that scores of beetles have dropped into the abyss in endeavouring to get at the oatmeal. Again, if you take a pie-dish, put a little beer in it, and place a few pieces of wood on the sides of the dish, during the night the beetles run up the tiny planks and bathe themselves in the beer, where you will find them next morning. So that odours do attract them, but what good essential oils would be we cannot imagine. We have, however, great faith in the beer and oatmeal when associated with efficient traps.

90/58. *Nemo.*—(1) Hydroquinone and quinol are the same thing, but quinol is not a good name, and is not in common use. (2) The price for stock developers (DIARY, page 392) is 1s. 6d. per pair.

90/55. *Cheshire.*—We have no experience in the matter.

90/60. *Scent.*—Heliotropin acts as an antipyretic when given internally, the dose being up to 15 gr. Whether it would be injurious or not, as you ask, depends upon how much you intend to give, and that you do not say.

90/62. *Statim.*—We do not understand from yours whether the cider which you bottle has been racked or not, and upon that the reply depends—in fact, this is one of those matters in which some personal investigation by the adviser is almost essential.

90/68. *Apprentice.*—We do not reply to anonymous querists.

90/43. *Vinegar.*—The first thing you will have to do before making the claret into vinegar is to take out a vinegar-maker's licence, which will cost you 1l. The next step is to expose the claret to the air for a few days, stirring occasionally; then you must distil it. Is the stock you have worth this trouble? Better sell it to a sauce-maker.

90/42. *Llandudoch.*—Hæmoglobin is, in France, a favourite remedy for anæmia, and is very largely used there in various forms, such as pills, dragées, liqueurs, wines, &c. The average dose is about 3 gr., thrice daily, but more may be given with safety. Many French physicians consider that they get better results from it than from iron.

89/40. *J. B. C.*—Herb-beer Extract.—The object of bringing the solution of extracts to the boil is to ensure destruction of all micro-organisms. Treacle contains plenty of these, too, and it is well to add it and the sacchar. ust. to the solution, and continue boiling for five minutes, then add the preservative. Cover, cool, and add the gingerin dissolved in the spirit.

89/42. *F. C. S.*—"The First Book of Electricity and Magnetism," by W. Perren Maycock, M.I.E.E., is very good. Whittaker & Co. publish it at 2s. 6d. The following are the text-books recommended by the examiners of the Sanitary Institute:—Clarke's "Plumbing Practice" (*Engineering and Building Record*, 6s.); Corfield's "Laws of Health" (Longman & Co., 1s. 6d.), and "Dwelling-houses: their Sanitary Construction and Arrangements" (Lewis, 3s. 6d.); Reid's "Practical Sanitation" (Griffin & Co., 6s.); Slagg's "Sanitary Work in the Smaller Towns and Villages" (Crosby, Lockwood & Son, 3s.); Taylor's "Sanitary Inspectors' Handbook" (H. K. Lewis, 5s.). Besides these there are other works of reference and Acts of Parliament which candidates for the Inspector's certificate should be acquainted with. Full particulars regarding the examinations are given in a pamphlet published by the Sanitary Institute, Margaret Street, W., at 6d.

97/17. *Bougie.*—Antiseptic bougies of various kinds are used in the treatment of gleet, but each case requires special consideration. Your one would be the better for 30-minim doses of tr. ferri perchlor. in 4 oz. of water thrice daily, and an injection of iodoform (5 per cent.) in starch mucilage.

97/18. *Apprentice.*—We are not sure that formalin would be the best preservative for an acid infusion of ginger. A grain of salicylic acid to the ounce would do just as well; but the infusion must be put into bottles while hot, and corked while the steam comes out.

97/4. *Piper.*—See reply to "Salol" in our issue of June 13.

95/44. *E. S. (Limerick).*—Label-paste.—See *C. & D.*, 1894, page 374.

97/15. *C. A. H.*—The Sausage-colourings now chiefly used are synthetic dyes, such as cardinal. In the case of smoky-red, we presume that there is a proportion of a brown dye put into it. You should have no difficulty in striking the proper shade after a little experimenting with aqueous solutions of cardinal or magenta and Bismarck brown.

97/2. *B. & S.*—The note in regard to Beeswax refers to bringing down the colour from brown to pale yellow. Wax cannot be whitened with sulphuric acid. To do that you must expose it to sunlight. You will find an article on the subject in the *C. & D.*, April 23, 1894, page 584.

95/54. *Jamaica.*—We have not a formula for Cashmere bouquet; but you may find one for something like it in our 1895 DIARY, which we presume you have.

97/34. *Injectio.*—The solution may contain in each ounce 5 gr. of quinine sulphate and 15 minims of dilute sulphuric acid; this quantity being sufficient for a pint of warm water.

93/56. *Ignoramus.*—Luminous Paint.—See page 433 of our issue of March 21.

95/19. *Pachydermata.*—You are worrying yourself unnecessarily about the ichthyosis. You will find in the DIARY, page 398, the names of skin hospitals, and if you write to the secretaries of these, enclosing a stamped envelope for reply, they will tell you when you can be seen as an out-patient. As to your marrying, we do not suppose any girl worth having would do else than sympathise with you in a trouble which is not infectious and which you are not responsible for.

95/74. *Vaseline.*—We have no such formula. What is it you exactly want?

96/6. *Major D.*—We give once a year in an Educational number very full particulars respecting examinations and how to prepare for them, so that we may save space the rest of the year. See, therefore, our issue of September 7, 1895, but, we may say to you, stick to the books which you have until you get a teacher; and you need books on theoretical chemistry, such as Thorpe's and Perkin and Kipping's.

94/28. *Pepsin.*—We do not know any book-treatise on pepsin, and question if such a one has been published since Boudault's, forty years ago—practically the whole of our pharmaceutical knowledge of pepsin has been acquired since then. Most of the information is to be found in such journals as this, but all that you can learn by reading may be summed up in one sentence—viz., Scale Pepsin is Made by macerating the inner lining of the pig's stomach in water acidulated with hydrochloric acid, filtering, evaporating the solution at a low heat until syrupy, then spreading on scaling-pans and drying. There are various wrinkles, which can be learnt by practice only, and manufacturers have modifications of the process. The old-fashioned way of making pepsin was to clean the stomachs, scrape the inside of them, and dry the scrapings on plates of glass at a low heat. The powdered scrapings are pepsin.

95/71. *In Doubt.*—If meat has become tainted, and the odour covered by such preservatives as bisulphites, it is not positively injurious. That is to say, meat both tastes and smells "high" when it has so far decomposed as to make decomposition visible by chemical tests. So no one ever thinks of extracting the ptomaines and testing for them, in order to prove that meat is tainted, when the nose can do that much quicker and just as well. Of course, in cases of suspected ptomaine-poisoning the toxicologist is called in, and he in the most grave manner proceeds to exhaust the meat with a weak acid solvent, and from that, after neutralisation, filtration, &c., extracts the ptomaines with ether, and gets them in such a state that he can kill a guinea-pig and a mouse or two with the poison, or show by chemical reactions that the ptomaines are the products of decomposition in the meat. We repeat, however, that we have not heard of any cases of poisoning from eating frozen meat, and it is not appreciably more liable to decomposition than unfrozen meat.

95/16. *Alberticus*—In the British Pharmaceutical Preliminary examination 40 per cent. in a subject is required for a pass, and 50 per cent. on the whole examination.

98/73. *M. E. R.*—See reply to "F. C. S." and write to the Sanitary Institute for their examination manual (price 6d.). Sanitary inspectors must pass the examination referred to therein.

95/58. *J. B.*—(1) A solution of nigrosin in methylated spirit has been used as a black stain for wood; but we are under the impression that it is not quite satisfactory. About 2 dr. of nigrosin to the pint is the strength. (2) We have seen a sugar syrup flavoured with peppermint used to attract bees to the hive after swarming.

99/89. *J. B.*—We fear that you could not polish combs if you were to try. After they are rough-polished on a revolving stone, the final polish is given by means of a wheel made up of discs of twilled cotton, which revolve at a terrific rate. Nothing else can give them the polish. You should send the combs to a maker to be repolished. The house from whom you bought may be able to get this done.

100/66 (*Pickles*) and 99/39 (*Septimus*).—Dr. W. Murrell's book on "Massagotherapeutics," published by Lewis at 4s. 6d., will suit you.

100/71. *Franciscus*—You should read again what is said on page 13 of "The Art of Dispensing" regarding the "3" sign in prescriptions. You are quite wrong in what you "understand."

INFORMATION SUPPLIED.

For this section we are always glad to receive from subscribers brief notes on practical subjects, recipes which have been found good in practice or which have required modification, and hints or fresh ideas on any pharmaceutical or trade matter.

Yellow Wound-stone.

Alum. sulph. ..	..	..	..	..	3xvj.
Ferri sulph. ..	..	..	..	..	3xxiv.
Cupri sulph. ..	..	..	..	..	3xvj.
Amm. mur. ..	..	..	..	..	3j.
Æugo æris ..	..	..	..	..	3ij.

Mix and fuse.

Worthing, June 12.

J. BURT.

Gould's Prescription—The prescription you give as an answer to "Syntax" is in error. I give you the following as correct, having examined a packet myself:—

Assar-bark	=	sassafras-bark
Condru-root	=	condurango-bark
Kradna-root	=	gentian-root
Rolique-root	=	liquorice-root
Noil-root	=	dandelion-root
Roek-root	=	burdock-root
Tacher	=	cat chiretta-stem

Condru-root, so-called, is really condurango-bark, and is used as a stomachic. Some words are spelt backwards to confuse those to whom the author advises it to be taken, and thus everyone desirous of it has to get it direct.

30 Southampton Row, W.C.

T. EDWARD HAYNES.

June 13.

INFORMATION WANTED.

The Editor invites, on behalf of inquiring subscribers, postcard replies to the following:—

183/5. Address of makers of the "Champion" stylographic pen.

100/74. Dr. Congreve's stronger liniment: formula or where obtainable?

Alpha (94/57) would be glad if any correspondent would furnish him with a good working formula for making "zinc-phosphate" stopping for filling decayed teeth. Two drachms of the powder and 2 of syrupy phosphoric acid are usually sold at 6s. 6d., which is an extravagant price, and many chemists who are also dentists would, he thinks, be benefited by the publication.

101/8. "Unison herb": who supplies this?

Next Week.

Tuesday, June 23.

Royal Photographic Society, 12 Hanover Square, W., at 8 P.M. "A Practical Demonstration of Colour Screen Making and Testing," by Mr. F. E. Ives.

Wednesday, June 24.

Plymouth and District Junior Chemists' Association. Botanical excursion to Yelverton and Burrator from Foresters' Hall, at 2 P.M.

Thursday, June 25.

Plymouth and District Junior Chemists' Association, at Foresters' Hall at 8.30 P.M. Mr. J. R. Johnston on "The Philosophy of Chemistry."